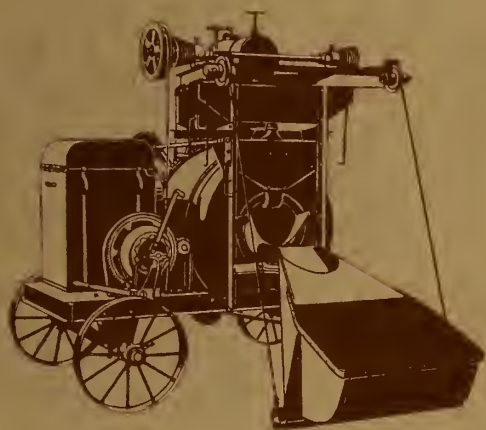


LONDON

NON-TILTING
CONCRETE MIXERS



LONDON
CONCRETE MACHINERY CO. LIMITED
LONDON - CANADA

Introduction



THE London Concrete Machinery Co. was incorporated in 1908 with an authorized capital of \$1,000,000.00. It is a purely Canadian Company, and has grown very rapidly. Our machines are known in every Country in the World, and wherever introduced they have proved satisfactory.

Our Factory is very complete in every detail, the equipment being of the most modern type. We employ the most scientific methods in the treatment and manufacture of all material used in the construction of our machines, producing in large quantities machines that are thoroughly standardized.

Construction. All of our machines are of a high class construction. They are built on the most improved designs and of the best materials available. **They are known for their high quality and their long life.** Every machine sold thus becomes a lasting advertisement to the London Concrete Machinery Co.

Spare Parts are carried at all our Branches and Agencies. We keep a record of every machine sold, and we guarantee to furnish any part from stock. This service is much appreciated by our customers.

This Catalogue describes our world famous line of **London Non-tilting Mixers.** We also manufacture the well-known line of **Ideal Tilter Mixers** in all sizes from the small farm machine up to the Builders' machine of one yard capacity. Also London Hoists, Contractors' Pumps, Concrete Carts, Concrete Block Machines, Concrete Brick Machines, Tile Machines, Tile Moulds, Rock Crushers' Screens, Elevators, a full line of Contractors' Machinery; also Coal and Quarry Machinery.

Prices. We will furnish prices for either domestic or foreign trade, together with drawings and more complete specifications on request.

Mail Orders. We are the largest Mail Order House in the Concrete Machinery Industry. All machines ordered through the mails are guaranteed as represented and may be returned by the customer if not suitable for his requirements and we cheerfully refund the purchase price. **Satisfaction Guaranteed with every order.**

LONDON CONCRETE MACHINERY CO. LIMITED,
LONDON, CANADA

Code: Concrete, London, Canada.

CANADIAN SALES OFFICES AND WAREHOUSES
IN ALL LARGE CANADIAN CITIES AND IN
MOST FOREIGN COUNTRIES.

Catalogue No. N-T-427



H. POCKOCK,
PRESIDENT



J. C. DOIDGE,
VICE-PRESIDENT

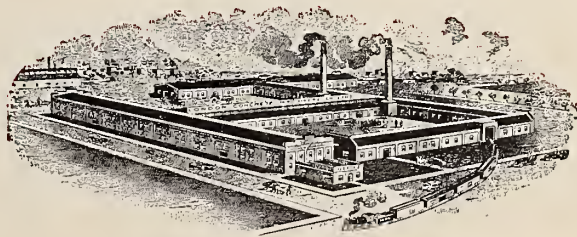


C. W. EASTWOOD,
SECRETARY

London Non-Tilting Mixers, described in this catalogue, are manufactured entirely in our plant at London, Canada, under original basic patents. They are recognized the world over by Engineers as standard in non-tilting mixer design. These machines are used in almost every country in the world.

Needless to say the **Design** has been imitated. This can be expected of any article universally accepted and is a compliment to the machine. However, we do not stand still. Modern methods of construction make new demands on the manufacturers of equipment and we, therefore, at all times keep our machine improved, not only up to, but well in advance, of engineering requirements. Our large modern plant, our competent engineers; and, ample capital along with co-operation from our customers, have all contributed their part in making **London Mixers** stand supreme in the Non-Tilting Mixer class.

Carefully read the **Catalogue**. Remember the service we give to our customers—the many exclusive patented features of **London Non-Tilting Mixers**—the long life and efficient service of our machine and when you require another Concrete Mixer buy a **LONDON**.

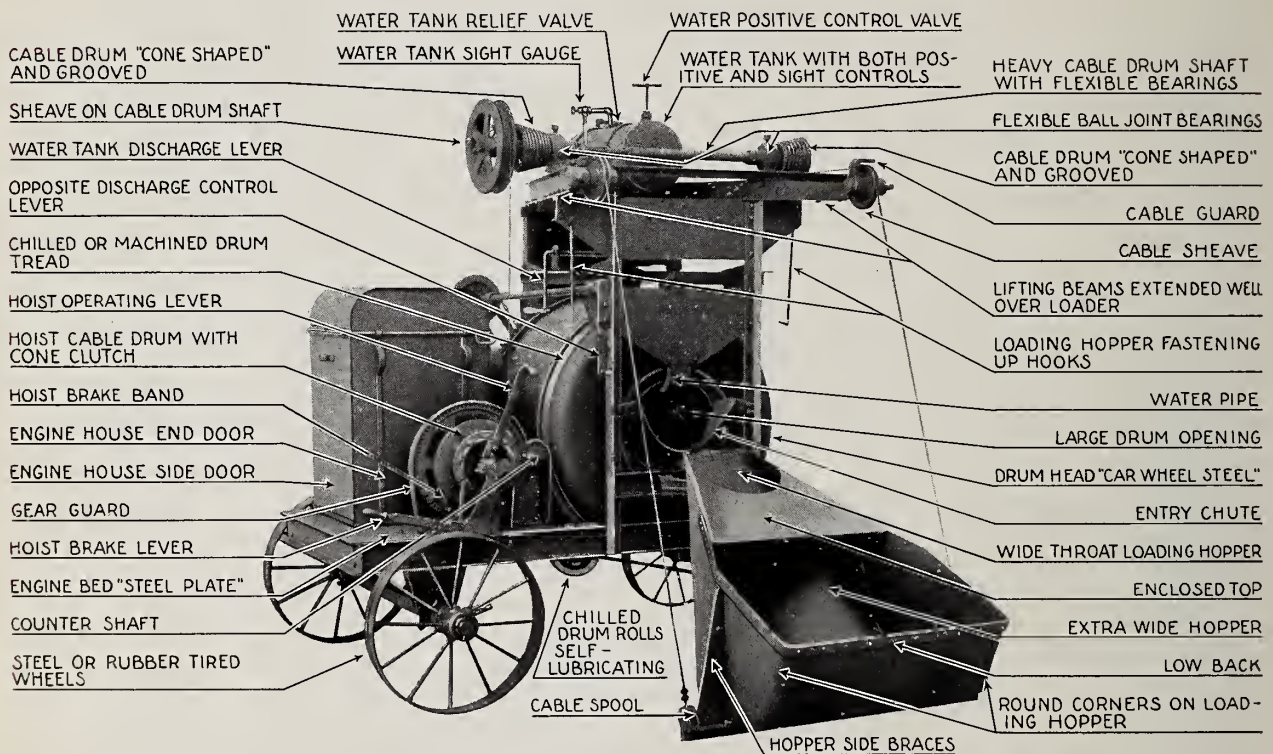


LONDON CONCRETE MACHINERY CO., LTD.,
LONDON CANADA

LARGEST MANUFACTURERS OF CONCRETE MACHINERY IN THE BRITISH EMPIRE

London Concrete Mixers

The illustration on this page is from an actual photograph of a London Concrete Mixer. The arrows indicate features which are distinctly London, and which add to the life of the machine, provide ease of operation and add to the mixing capacity with lower operating cost.



Our Engineers have constantly kept pace with modern methods of construction and design, and the result is that our machines are accepted everywhere as the standard for high-class concrete mixer construction.

London Concrete Mixers are built to stand up for years under the most severe use. They do rapid mixing and produce just the kind of concrete that the engineer calls for. They are economical to operate and every hour they are in use they demonstrate the truth in the old saying, "The best is the cheapest in the long run."

POWER CONNECTION

Standard Equipment for Mixers ordered without power includes: on Nos. 6 and 7-S, friction clutch and gear for engine shaft; on sizes Nos. 9-S, 11-S, 15-S, 21-S, 30-S, 42-S and 56-S gears on countershaft or pulley is standard equipment. Clutch for gasoline engine drive can be supplied as an extra, but are included as standard equipment on all machines ordered with gasoline engines. All machines equipped with electric motor have reduction gears for speed reduction.

Note—When mixers are ordered without power, if to be operated with electric motor, reduction gears should be ordered extra, giving speed and diameter of motor shaft. (See illustrations on pages 9 and 22.)

London Concrete Mixers

There are many Points to consider when selecting a Concrete Mixer, all of which are of more real importance than is generally realized. **Too often** it is assumed that all Mixers are good and that the concrete produced from one machine is the same as that from another.

Every Engineer knows that the uniformity of the concrete produced does vary with the Mixer and that the quality and permanence of the work depends entirely on the thoroughness with which every unit of aggregate and every grain of sand is coated with cement.

It is very Important that the cement be evenly distributed over the surface of every particle. It is also just as important that the stone and sand be evenly distributed throughout the entire mass thus filling all the void and making a close grained, impervious concrete.

The Method employed in wetting the mixture is equally important. Water, cement and sand in itself will not make good concrete. Too much water will cause the materials to separate, the cement to rise to the top and the stone to settle to the bottom: **therefore**, a Concrete Mixer should be used which will produce a tough, creamy, dense mixture. It does not require a lot of water to make concrete flow, all that is required is good mixing; properly made concrete will flow freely.

The mixing should be so thorough as to force out all the air thus producing a creamy, homogeneous mixture which will make a dense concrete having strength-resisting qualities equal to that of granite.

The London Concrete Mixer accomplishes this, not by just rolling the materials

over in the drum but by a combination of different movements of the materials within the drum, rolling, spilling, cutting, slashing, spraying, breaking and reversing. As the material is carried upward it is cut through by diagonal blades and carried continuously by a set of lifting buckets to the extreme top of the drum from whence it is thrown with great force downward unto the reverse side of the discharge chute. This violent action breaks it up spreading it in a reverse direction to the action of the blades. These blades again grasp the material in its descent thus breaking and dividing it hundreds of times.

The action of spilling from the top of the drum onto the reverse side of the discharge chute forces all the air out. The action of the diagonal blades and lifting cups prevents the coarse material from settling to the bottom of the drum.

Capacities. Our Mixers of sizes No. 7-S and larger, are rated at their capacity in Mixed Concrete. It will be noted by their numbers that they are larger than called for by Standard Specifications. This is a decided advantage, as oftentimes it is a great convenience to have a machine just a little larger than the specifications call for. They take less power than smaller machines overloaded. London Concrete Mixers are made in the correct sizes to meet every engineering requirement.

The Concrete produced by all London Concrete Mixers is uniformly mixed. The materials are evenly distributed; all particles are coated with cement; all air is expelled from the mixture and the concrete as delivered from the drum is uniform and without variation in density or structural strength.

Drum of London Concrete Mixer

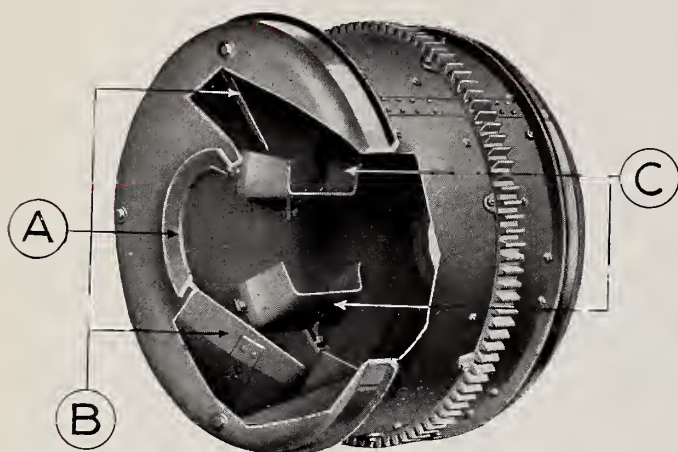


Fig. A-1—Interior View of Mixer Drum when empty.

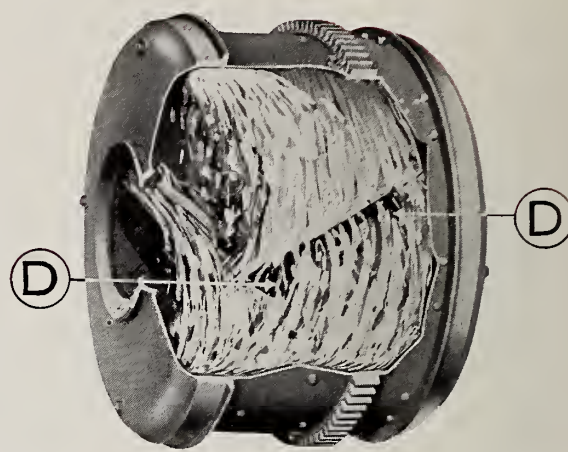


Fig. A-2—Interior View of Mixer Drum mixing a Batch of Concrete.

The Mixing Drums on London Concrete Mixers are what are commonly known as the **Non-Tilting** type, now recognized by engineers as the standard in high-grade Mixer construction.

Non-Tilting is a term applied to a mixing drum which will discharge its contents without the drum being tilted, a spout or chute being operated within the drum so as to discharge the contents at the will of the operator. The following will illustrate the operation of the mixing drum on London Concrete Mixers.

Fig. A-1 illustrates the empty drum with section cut away and discharge chute removed. A is the charging opening. B is the mixing blades which are set at an angle, as the drum rotates, they lift the materials and at the same time slide them into the lifting buckets. C is the steel lifting buckets which carry the materials to the extreme top of the drum for the purpose of increasing the mixing speed and to deposit the concrete into the discharge chute when discharging.

Fig. A-2 illustrates the drum in mixing action. D is the discharge chute reversed. During the process of mixing, the lifting buckets

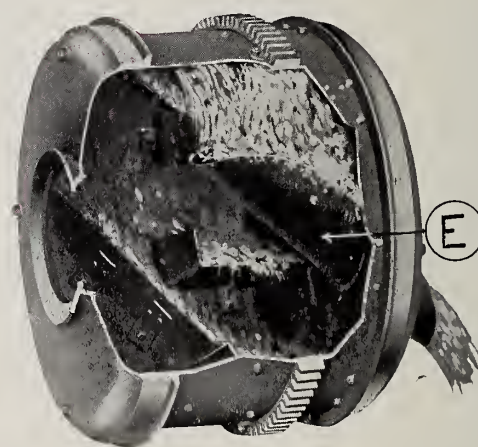


Fig. A-3—Interior View of Mixer Drum, illustrating the Discharging of a Batch of Concrete from the Drum.

carry the materials to the extreme top of the drum and in its descent it is thrown unto the chute, which being in a reversed position, with the round side up, spreads the materials in the reverse direction and, at the same time, diverts them toward the charging end of the drum. The materials, when being mixed, are travelling in several different directions at the same time, insuring a perfectly mixed concrete.

Fig. A-3 illustrates the mixing drum in the process of discharging its contents. E is the discharge chute in discharging position. The lifting buckets deposit the material into the chute and the contents are quickly and cleanly discharged. In all cases the concrete is uniform, the coarse aggregate being equally distributed throughout the entire mixture. This type of drum has many advantages over other types and is, therefore, universally accepted as standard in design.

Construction. We use car wheel steel on all drum heads. The treads are chilled and

ground on our small size machines and on sizes 9-S and larger, all treads are machined; both methods insure smoothness of operation and long life.

The Drum Gear has an extra wide face, smooth, clean teeth, quiet running and built to stand 20 years' constant use. On all sizes the drum gear is cast separate, and is in removable sections. The drum sheets are heavy, high carbon steel. A Concrete Mixer is no better than its drum. The London is built to stand long use under the most trying conditions.

Drum Rolls of London Mixers

We use on all the London Mixers drum rolls which are made from car wheel steel. The treads are chilled, hardened and ground perfectly smooth and are almost indestructible. They are self-oiling. The drum roll is provided with an oil reservoir which holds oil sufficient for one week's operation. This reservoir encircles the roll shaft; about $\frac{1}{4}$ inch in length of the shaft is submerged in the oil which finds its way to the bearing, no attention being required except to fill with heavy oil once each week.

The hubs are protected with a dust rim. The bearings are long and large and will not wear out in many years use if kept supplied with oil.

Description of Illustrated Parts.

- A and H—Chilled Hardened Drum Roll Treads.
- B —Drum Roll Shaft Bracket.
- C —Oil Chamber Plug.
- D —Oil Chamber.
- E —Drum Roll Shaft. (High Carbon Cold Rolled Steel).
- F —Channel Beam Frame of Mixer.
- G —Dust Flange.
- I —Oil Chamber, showing oil therein.

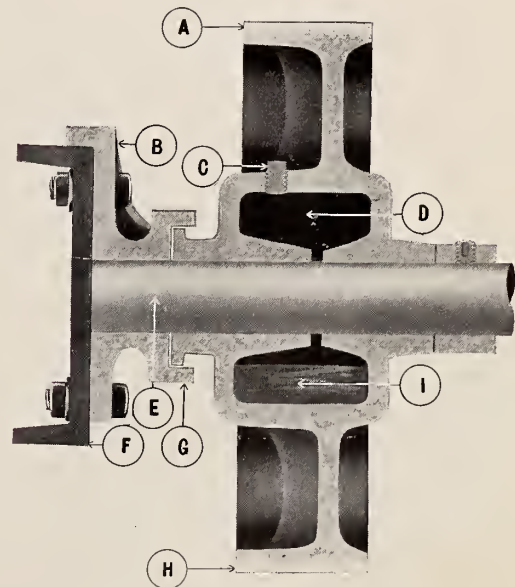


Fig. A-4—Sectional View of Self-Oiling Drum Roll.

London Concrete Mixer, No. 4

The London Concrete Mixer, No. 4, is suitable for such work as building foundation walls, curbs and gutters, sidewalks, silos, barn walls, or any kind of work requiring a small portable machine. It can be operated by one man, or a number of men, as desired.

Capacity. The drum mixes at a batch $5\frac{1}{2}$ cu. feet of material; proportions, 3 cu. ft. of stone, $1\frac{1}{2}$ cu. ft. of sand, and 1 bag of cement or 4 cu. ft. of gravel and 1 bag of cement. It will mix a batch per minute and has an average working capacity of 40 cu. yds. per day.

The Stationary Loading Hopper with gate allows the operator to get one batch ready while another is being mixed, thus adding double to the capacity of the machine.

Contractors everywhere have found the London, No. 4, a suitable machine for small work. It is easily operated, costs little to run and turns out good concrete. This machine will mix any kind of concrete or mortar, and it will cut the cost of mixing concrete to one-third that of hand labor; it also **saves cement** and makes a better concrete.

Power Used. This machine can be supplied equipped with electric motor or gasoline engine. We herein illustrate the machine equipped with **Novo dust and frost-proof**



Fig. A-5-A—No. 4 Viewed from Charging Side.
With Solid Rubber-Tired Roller-Bearing Truck Wheels.

gasoline engine. This engine costs more than the ordinary open type engine, but it is cheaper in the end as on a Concrete Mixer it will wear, at least, three times as long. All engines are equipped with **Wico High Tension Magnetos** and are covered with a heavy steel house.

Built to Last. The drum heads and rolls are made from car wheel steel. The tread on both heads and rolls are chill hardened and ground smooth and will wear for years. The rivets are all hot driven with coned heads. These machines are built of the very best material and workmanship that a modern plant can produce.

Fig. A-6 illustrates the No. 4 machine mounted on standard steel trucks, heavy steel wheels with staggered spokes, provided with oil cups and dust bands; steel axles; heavy cast iron axle bracket and pulling bale.

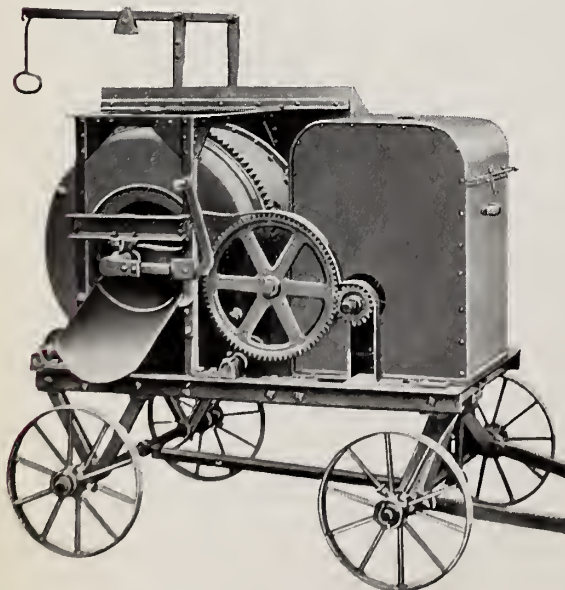


Fig. A-6—No. 4 Viewed from Discharging Side. The discharge chute is in position to discharge the batch; by throwing the lever to the left the upper chute is reversed and it ceases to discharge.

Figs. A-5-A illustrates No. 4 Mixer equipped with rubber-tired, roller-bearing wheels. These wheels are interchangeable with the standard steel wheels. This outfit can be hitched behind a truck and will travel at 20 miles per hour. The roller bearings in the wheels makes the machine easy to move around on the job and they are almost indestructible.

The London No. 4, Trailer Mixer is designed to be attached to a truck and thus be moved quickly over hard or rough roads at a high rate of speed. It is regularly equipped with two solid rubber tired, roller-bearing wheels, it will travel over rough road at 20 miles per hour. We also can furnish the machine equipped with Ford wheels and pneumatic tires at a small additional cost. Many Cities and Municipalities have work where the materials are loaded on a truck and the Mixer attached behind, permitting moving from one place to another at high speed and concrete to be mixed instantly on arrival. They are especially suitable for repairing Concrete Pavement; also largely used for Curb and Gutter work, Culverts, Foundations or any class of work where the machine is to be moved long distances.

When the machine is in operation the front end is dropped on to the Suspension Bracket and the machine is perfectly balanced. The tongue can be dropped down out of the way. The tongue can also be adjusted to any height to suit the vehicle to which it is to be attached. There are many classes of work on which a London No. 4 Trailer Mixer can be used to advantage.

A Very Low Price. By manufacturing in very large quantities, we have been able to produce and sell the London Concrete Mixer, No. 4 in all types as illustrated hereon at a very low price, and at the same time have maintained our high standard of quality.

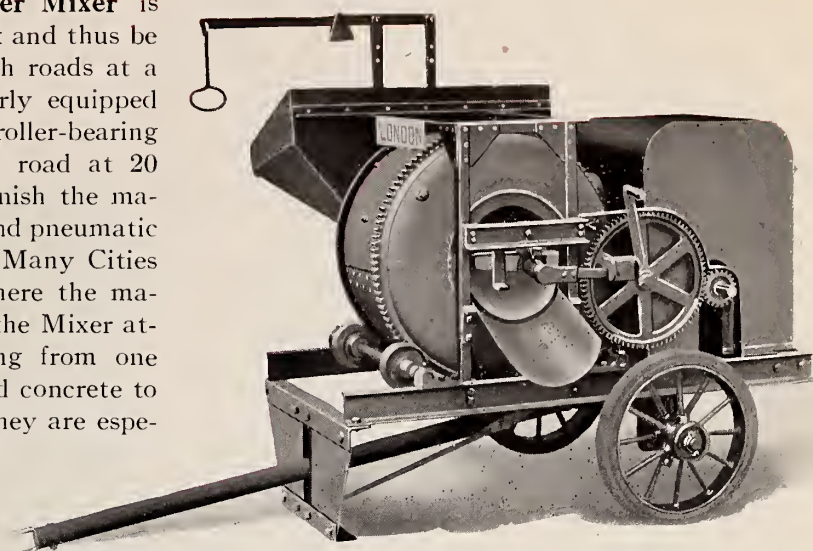


Fig. A-7—No. 4 Trailer with Solid Rubber-Tired Roller-Bearing Wheels; axles are mounted on oil tempered cushion springs, enclosed in cage bracket, which takes care of all vibration when travelling at high speed.

See Illustration of Spring Bracket



The Machine is Equipped Complete as shown, with Stationary Loading Hopper, High Tension Magneto and Steel House for Engine; most manufacturers quote these as extras. We ship the London complete—ready to work.

Pays for itself in Thirty Days. We guarantee that the **London Concrete Mixer, No. 4**, if used to its full capacity will more than save the price of itself over hand mixing in the first thirty days' use and on the smallest kind of work **it will save the contractor the price of itself twice in a season.**

London Concrete Mixer, No. 4,

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. s pace	
110	On 4-wheel truck, without power, with Engine Gear	1256	1550	72	Cmpz
111	On 4-wheel truck, with 2 H.P. Novo Gasoline Engine, with Magneto and Steel House	1611	2100	92	Cypl
	4 Solid rubber-tired roller-bearing wheels if required instead of steel wheels.....extra	132	132		Tirs
112	Trailer Mixer with solid rubber-tired roller-bearing wheels, 2 H.P. Novo Gasoline Engine, Magneto and Steel House	1720	2200	92	Copm
113	Trailer Mixer with Ford Automobile Wheels, Pneumatic Tires, with 2 H.P. Novo Gasoline Engine, Magneto and Steel House	1533	2000	100	Cwpj
114	Jackshaft, Bearing and Reduction Gear with Guard for Electric Motor when ordered separately.....	150	200	100	Cipv
	Concrete Mixers, equipped with Electric Motors, quotation on advice of current used.....			6	Cuph
	If 3 H.P. Novo Gasoline Engine required instead of 2 H.P. Engine, which provides 30% surplus power..... extra	100	100		Gkxp

(See Specifications, pages 26-27).

The London Concrete Mixer No. 6 is a popular size machine. It is suitable for such work as building foundations, bridges, abutments, sidewalks, sewers, or any kind of work where a medium size portable machine is required.

Capacity. The drum mixes at a batch $8\frac{1}{2}$ feet of unmixed material: proportion 5 cu. ft. stone, $2\frac{1}{2}$ cu. ft. sand, and one bag of cement, or 6 cu. ft. of gravel and one bag of cement. It has an average working capacity of 6 cu. yards per hour.

Operated with few men. When necessary, one man can operate the machine or a number of men can be economically employed if the job is of sufficient size to use the full capacity of the machine. Each man with the machine will produce four times as much concrete as by hand mixing, thus cutting 75% off the labor cost.

A **Stationary Loading Hopper** with gate, which is standard equipment, is large enough to hold one complete batch so that another can be gotten ready while the drum is mixing a batch, thus keeping the drum mixing practically all the time and adding double to the capacity of the machine.



Fig. A-10—No. 6 Viewed from Charging side and equipped with Rubber-Tired Roller-Bearing Wheels.

The Drum revolves 20 times per minute. The blades and lifting buckets cut and divide the material hundreds of times, insuring a rapid and thorough mix. The drum will completely discharge its contents in 10 seconds; turning the lever to the right, as shown in Fig. A-9, brings the discharge chute into action.

Power Used. We can supply machine equipped with Electric Motor or Gasoline Engine. The machines illustrated in Figs. A-9 and A-10 are equipped with **Novo Dust and Frost Proof Gasoline Engines**. Fig. A-11 shows the machine equipped with electric motor. We use best Canadian make of electric motors on all electric operated outfits. The Novo Gasoline Engine is high grade; it is built vertically the same as all automobile engines, the only correct way for all high power engines. The crankshaft runs in oil, the splash system being used which automatically supplies oil to all interior working parts. This type of engine will last three times as long as the ordinary open type engine when used on a concrete mixer; it takes less room and weighs less which is a decided advantage as the outfit is easier moved from one job to another.

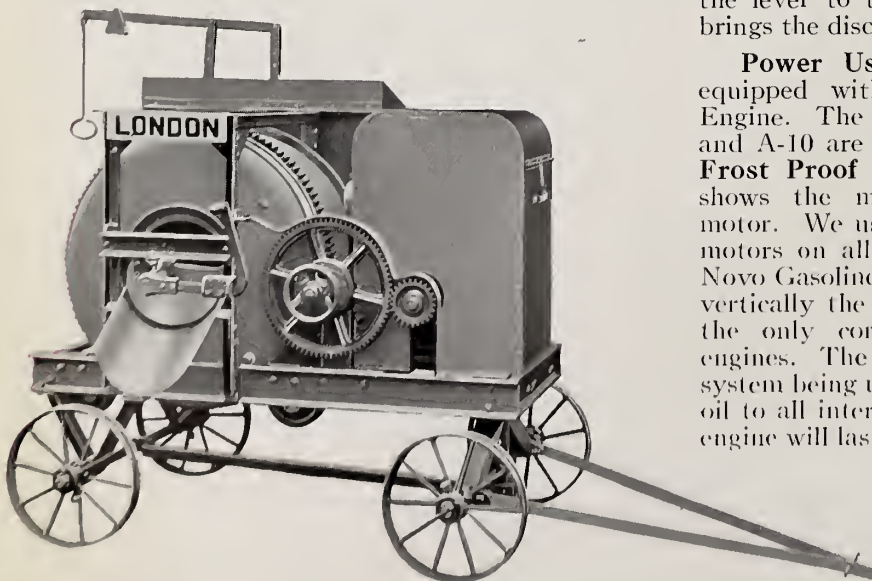


Fig. A-9 No. 6 Viewed from Discharging side. Discharge Chute is shown in position to discharge the batch. While mixing the chute is reversed in the drum.

Built to stand hard usage. The machine is constructed entirely of steel. The drum rolls and drum heads are made from car wheel steel and the treads are chilled. All parts extra heavy. High grade construction throughout which insures long life and low operating cost.

Will save the price of itself. If operated to its full capacity the machine will, at least, save the price of itself over hand mixing in thirty days use, or, on the very smallest kind of work the machine should save the price of itself, at least twice in one season.

Equipment Complete is furnished. The Engine is connected with Friction Clutch, Steel House over Engine, High Tension Magneto,



Fig. A-11—No. 6, equipped with Electric Motor showing Reduction Gears for Motor drive. This is standard installation for Electric Motors on all sizes of machines. All Motors are covered with Steel House of same type used with Gasoline Engine.

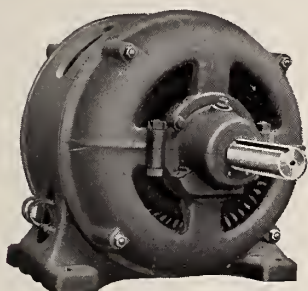


Fig. A-110—Canadian Westinghouse Electric Motor as used on electric operated outfits, made in sizes 2 to 30 H.P.

Stationary Loading Hopper, with gate; pulling bale for truck; all complete ready to operate. No Extras. All are furnished with this machine. The first cost is the whole cost.

By making in large quantities, we have been able to supply a high grade medium size concrete mixer at a cost within the reach of all.

London Concrete Mixer No. 6, with Stationary Loading Hopper

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. Space	
120	On trucks, without power, with Friction Clutch and Engine Gear.....	1765	2150	92	Dkqx
121	On trucks, with 3 H.P. Novo Gasoline Engine, Magneto and Steel House.....	2235	2880	143	Dwqu
1296	Jack Shaft Bearing and Reduction Gear with guard for electric motor, when ordered separately.....	150	200	6	Duph
122	On trucks, with Electric Motor, Housed. Quotation on advice of current used	2225	2725	140	Dugh
1210	If 4 H.P. Novo Gasoline Engine is desired instead of 3 H.P., which provides 30% surplus power—Extra.....	110	110	.....	Divq
1220	Rubber-tired Roller-bearing Wheels instead of Steel Wheels—Extra.....	132	132	.....	Tirs

(See specifications, pages 26-27)

London Concrete Mixer, Nos. 4 and 6 with Hoist Combination

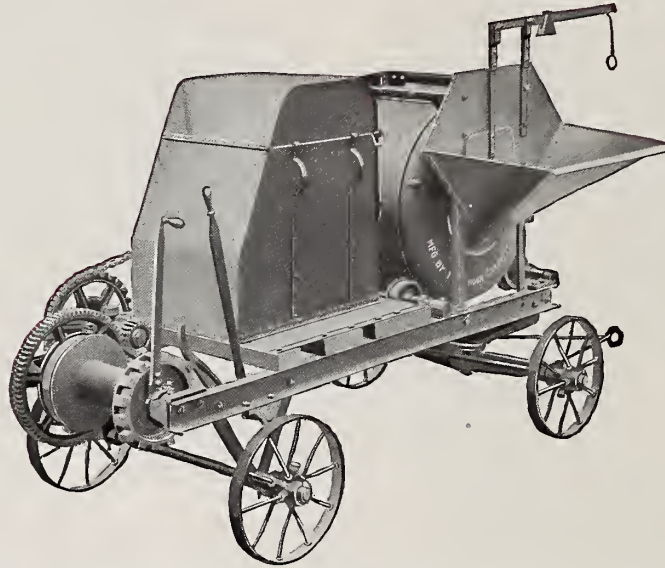


Fig. A-12—No. 4 Concrete Mixer, with Hoist Combination, Viewed from Charging side.

There is a growing demand for a Combination Outfit consisting of a Concrete Mixer and Hoisting Drum, connected together and operated with one Gasoline Engine or Electric Motor.

On many small jobs where a Concrete Mixer is used a Hoisting Drum is indispensable but it is not always convenient for the Contractor to provide two machines, therefore, our Combination Machines meet a **Real Need in the contracting business.**

Our Concrete Mixers with Hoist Combination, are of the same size and capacity as our Standard Mixers, Nos. 4 and 6, illustrated on pages 6, 8 and 9, but they are equipped with larger engines and a Hoisting Drum is built in as part of the Outfit.

A **Real Builders' Hoisting Drum** is built on the same truck as the Concrete Mixer, both Hoisting Drum and Concrete Mixer are connected to the Engine or Motor making a power operated Mixer and Hoist all in one unit.

Either the Concrete Mixer or Hoisting Drum can be used separately or they can both be used at once as preferred, the Hoisting Drum and Mixer being connected by a friction clutch.

The Hoisting Drum is 6" in diameter by 12" long and holds 600 feet of $\frac{3}{8}$ " cable. The Hoisting Drum Clutch is of the well-known cone type, the same as used on all large Hoisting Engines. The Hoisting Drum is provided with ball thrust bearings which reduces friction and provides for easy spinning of the drum after lifting the load. The Hoisting Drum is provided with separate levers for lifting the load and operating brakes, wide brake bands which will hold with only a few pounds pressure on brake lever.

Rubber Tires—Concrete Mixers, Nos. 4 and 6, with hoist combination can be furnished with rubber-tired roller-bearing wheels, which are very desirable when the machine is to be trailed long distances behind a truck at high speed.



Fig. A-13—No. 6 Concrete Mixer with Hoist Combination, Viewed from Discharging side.

The Lifting Capacity of the Hoisting Drum is two ton. No. 4 Outfit is equipped with a 4 H.P. Engine, which will lift 1,600 pounds on a single line. The No. 6 Outfit is equipped with a 6 H.P. 2-Cylinder Engine which will lift 2,400 pounds on a single line. The capacity of the Hoisting Drum depends upon the size of the Engine used. When equipped with Electric Motor we use 3 H.P. on No. 4, and 5 H.P. on No. 6 Outfit, giving a working capacity as stated herein for Gasoline Engines. Electric Motors will carry 25% overload for short periods.

The Concrete Mixer is direct connected to Engine with Clutch Gear. Hoisting Drum is connected with sprocket and steel roller chain which gives a smooth easy running motion to the driving power.

Power Used. On Standard outfits we use exclusively Novo Gasoline Engines, on Electric Driven outfits we use best Canadian make of Electric Motors, making a high-grade, self-contained outfit; one which will be found adaptable to all kinds of contract work, giving long life and efficient service.

The Mixer can be hauled a short distance under its own power by attaching the drum cable to a stake driven in ground, then operating hoist which will move the Mixer.

London Concrete Mixers No's. 4 and 6 with Hoist Combination.

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
125-S	No. 4, on trucks, with 4 H.P. Novo Gasoline Engine, Magneto and Steel House (Engine provides sufficient power to operate both Mixer and Hoist at the same time)	2375	2975	120	Cspf
126-S	No. 6, on trucks, with 6 H.P. Novo 2-Cylinder Gasoline Engine, Magneto and Steel House (Engine provides sufficient power to operate both Mixer and Hoist at the same time)	2585	3800	194	Dyql
126-O	Rubber-Tired Roller-Bearing Wheels instead of Steel Wheels for either size machine extra	132	132	...	Tirs
	Electric operated Mixers, quoted on receipt of information as to current used				

(See specifications, pages 26-27)

London Concrete Mixer, No. 6

with Power Loading Hopper

The London Concrete Mixer No. 6, with Power Loading Hopper, is suitable for building bridges, abutments, sidewalks, foundations or for any kind of work requiring a portable machine.

Capacity—The Drum will mix $8\frac{1}{2}$ cubic feet of material, proportions: 5 cubic feet stone, $2\frac{1}{2}$ cubic feet sand and one bag of cement, or 6 cubic feet of gravel and one of cement. It will mix one batch per minute and has an average working capacity of 6 cubic yards per hour.

The Power Loading Hopper raises very high. It has round sides and corners. It makes a quick, clean discharge into the drum without spilling.

Less Power is Required to raise the power loader on London Mixers, because the beams on which sheave are mounted are overhung, making a straight lift without straining the machine. The loader passes well in between the beams, charging the drum rapidly.

The Drums on Windlass Shaft are tapered and grooved, equalizing the load on the engine. The windlass shaft runs in flexible ball joint bearings.

The Hoisting Drum is 8" in diameter and 4" long. It is set directly under the windlass sheave in such a position as to prevent piling of the main cable. There is never more than one depth of cable on the drum. This feature guarantees smooth operation and long life to the cable.

The Hoist Clutch is just like those used on large hoisting engines; it is of the well known cone type with oil cured oak friction blocks, acting in polished semi-steel clutch body, with hoist and brake levers set in convenient position for operation.

Two Side Discharge Levers are shown in illustration herein. They allow the operator to discharge the drum while standing on either side of the machine. All machines are built that this can be attached at any time.

The Automatic Water Tank is of the pressure type. It is equipped with sight feed, also has a set batch valve so that the amount of water can be gauged by sight or the tank can be set to automatically measure the water required for each batch.

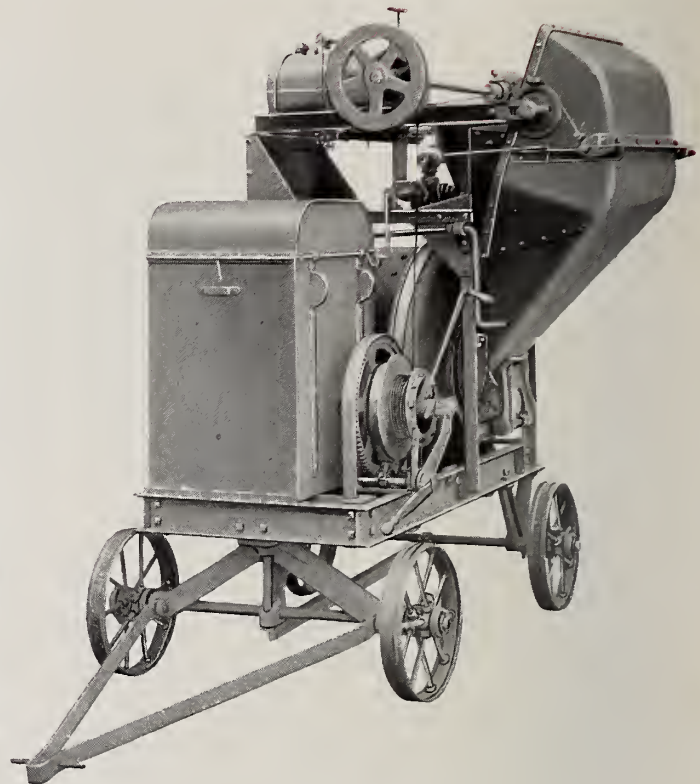


Fig. A-14—London Concrete Mixer, No. 6, with Power Loading Hopper. Truck with standard steel wheels. Note how high the loading hopper raises.

Power Used—We use the Novo Single Cylinder Gasoline Engine, 4-H.P. This is a high grade motor of the vertical, self-contained type. We also supply this machine equipped with electric motor of best Canadian make, or equipped with reduction gears ready to attach motor.

The Engine House is built from heavy sheet steel with angle iron frame, with ventilator in the top. It has two removable doors, full height, allowing access to the engine. The house is so constructed that it can be removed by taking out four bolts. It has a neat appearance and built to last.

The Construction of the Machine is high grade throughout. It is built to give long and satisfactory service.

It is a General Purpose Machine.—It has a mixing capacity sufficient for a large percentage of the concrete work being done. All levers being grouped together permit the machine to be operated by one man, regardless of the number of men employed in supplying material to the machine and placing the mixed concrete.

It is Portable.—The frame is built high enough to allow the front wheels to turn clear under so that it will turn around in little more than its length. The Power Loader hooks up in a vertical position. The Machine is designed to be easily and quickly moved from one job to another. It is ready for use instantly on arrival; and has many features which make it a very desirable machine for a large variety of work.

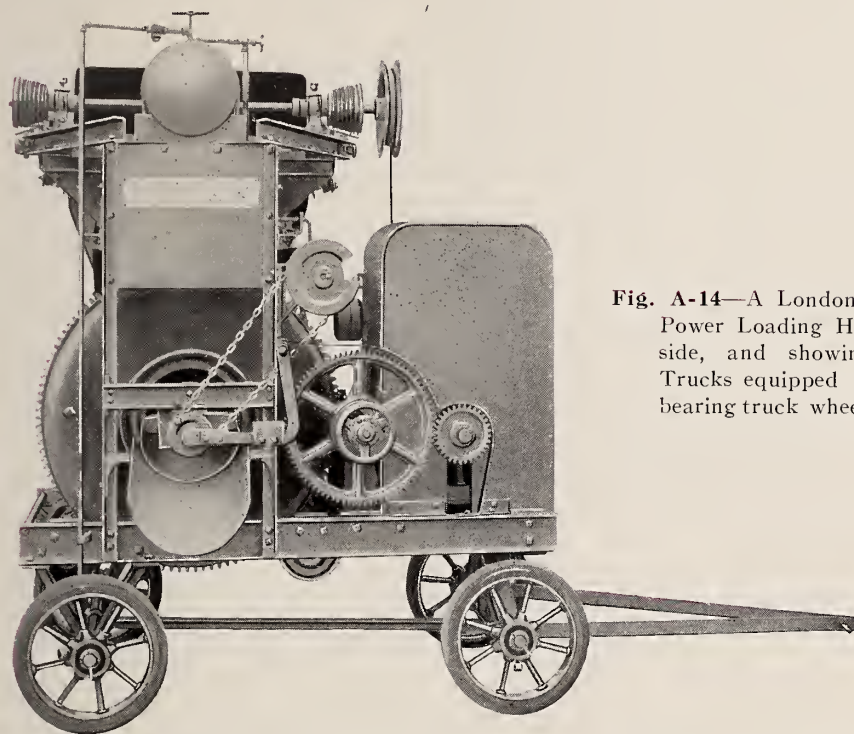


Fig. A-14—A London Concrete Mixer, No. 6, with Power Loading Hopper. Viewed from discharge side, and showing two side discharge levers. Trucks equipped with solid rubber-tired, roller-bearing truck wheels.

London Concrete Mixer, No. 6, with Power Loading Hopper.

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0127	On trucks, with Power Loading Hopper, without power, with Friction Clutch Gear.....	2450	3450	110	Dgqt
0129	On trucks, with Power Loading Hopper, with 4 H.P. Novo Gasoline Engine, Housed.....	3035	4000	172	Deqr
0290	If 6 H.P. Two Cylinder Novo Engine desired instead of 4 H.P., which provides 50% surplus power—Deduct.....	150	150	.....	Sixo
0130	On trucks, with Power Loading Hopper with Electric Motor, Housed.....	on application.			
0131	Automatic Water Tank, Extra.....	104	104	.....	Dcqp
0132	Two Side Discharge Levers, Extra.....	41	41	.....	Doqb
0003	Rubber-tired Roller-bearing Truck Wheels instead of Standard Steel Wheels —Extra.....	132	132	.....	Tirs

(See specifications, pages 26-27.)

London Concrete Mixer No. 7-S

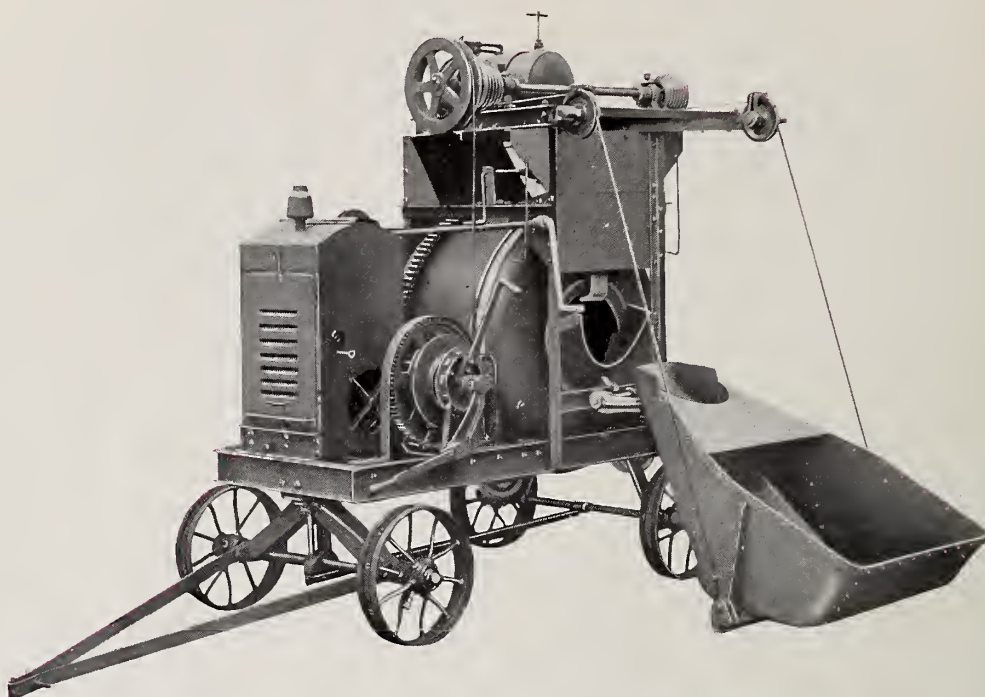


Fig. A-15—London Concrete Mixer, No. 7-S, with Power Loading Hopper, with Gasoline Power. Note the wide loading hopper with round corners.

The London Concrete Mixer No. 7-S is suitable for building public sidewalks, bridges, abutments, piers, heavy foundations or any kind of work requiring a comparatively large size portable machine.

Capacity—The drum mixes at a batch 10 cu. ft. of unmixed material, proportions: 6 cu. ft. stone, 3 cu. ft. sand and one bag of cement, and under all conditions will hold 7 cu. ft. of mixed concrete. It has an average working capacity of 9 cu. yards per hour.

There is a Great Demand for a machine of this size. Oftentimes it is desired to mix concrete of unusual lean proportions for such work as under-ground foundations. With this machine it is possible to mix a one bag batch under all conditions, or on work such as curb and gutter, two bags of cement can be mixed at once, giving the proper proportions.

Power Used—We use on all standard outfits the Novo 6 H. P. Two Cylinder Gasoline Engine. It is of the enclosed industrial type, hopper cooled, force feed oiling system. Throttling governor running in oil; Splitdorf Magneto. This type of engine gives the maximum power and long life under constant service.

London Machines Take Less Power—Two heavy channel lifting arms permit the power loader to lift almost vertically, taking one-third less power than when the cables run direct to the drums. Also, note that the power loader passes clear in between the lifting arms to a 55 per cent. angle which insures a clean, quick discharge without having to pound the bottom of the hopper.

High Speed Action—Like all sizes of London Mixers, it has high speed action. The power loading hopper raises in six seconds. The drum runs 20 revolutions per minute. and has a rapid discharge.

The Construction Throughout is high-grade. Car wheel steel drum rolls, self-oiling type with chilled tread ground smooth. Car-wheel steel drum heads with chilled treads. All gears semi-steel from master patterns. All

shafting high carbon, cold rolled steel. Main frame of bridge construction; rivets hot driven; lock washers under all nuts. Cables, best crucible steel. Hoisting drum clutch of the well known cone face type like that used in large Hoisting Engines. Separate hoisting levers and brake. Built throughout to insure long life, low operating cost, big mixing capacity and to meet the requirements of the most exacting engineer or contractor.

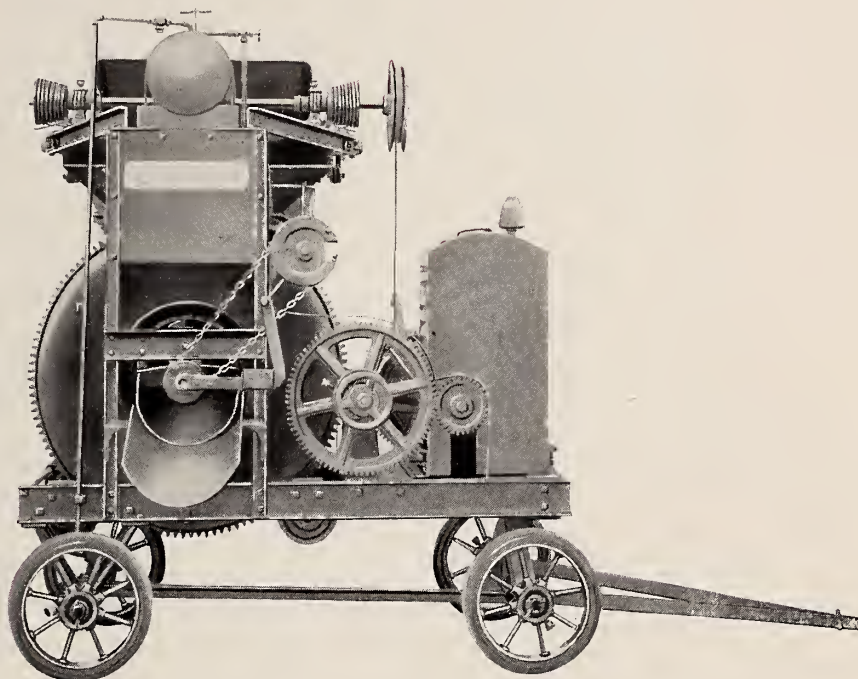


Fig. A-15-A—London Concrete Mixer, No. 7-S, viewed from discharge side, and equipped with solid rubber-tired roller-bearing truck wheels.

London Concrete Mixer, No. 7-S, with Power Loading Hopper

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0133	On trucks, with Power Loading Hopper, without power, with Friction Clutch Gear.....	2780	3680	150	Bmoz
0135	On trucks, with Power Loading Hopper, with 6 H.P. Novo Two Cylinder Gasoline Engine, Housed.....	3130	4200	177	Bkox
0136	On trucks, with Power Loading Hopper, with Electric Motor, Housed.....	on application.			
0137	Automatic Water Tank, Extra.....	110	110		Bwoj
0138	Two Side Discharge Lever, Extra.....	41	41		Biov
0003	Rubber-tired Roller-bearing Truck Wheels instead of Standard Steel Wheels —Extra.....	132	132		Tirs
Deduction					
0139	If Stationary Loading Hopper required instead of Power Loading Hopper, deduct.....	600	600		Buoh

(See specifications, pages 26-27.)

London Concrete Mixer, No. 9-S

The London Concrete Mixer, No. 9-S, is a medium size, Heavy Duty Machine. It is suitable for building Concrete Structures, such as, Breakwaters, Dams, Power Houses, Foundations and all kinds of heavy work.

Capacity. The drum will mix $12\frac{1}{2}$ cu. ft. of material, proportions: 7 cu. ft. stone, $3\frac{1}{2}$ cu. ft. sand and 2 bags of cement; and, under all conditions will hold 9 cu. ft. of mixed concrete without overloading. The machine will mix a batch per minute or under average working conditions, 10 cu. yards per hour. There are many kinds of work where a machine of this capacity is called upon to mix 2 bags of cement per batch. The No. 9-S meets this requirement.

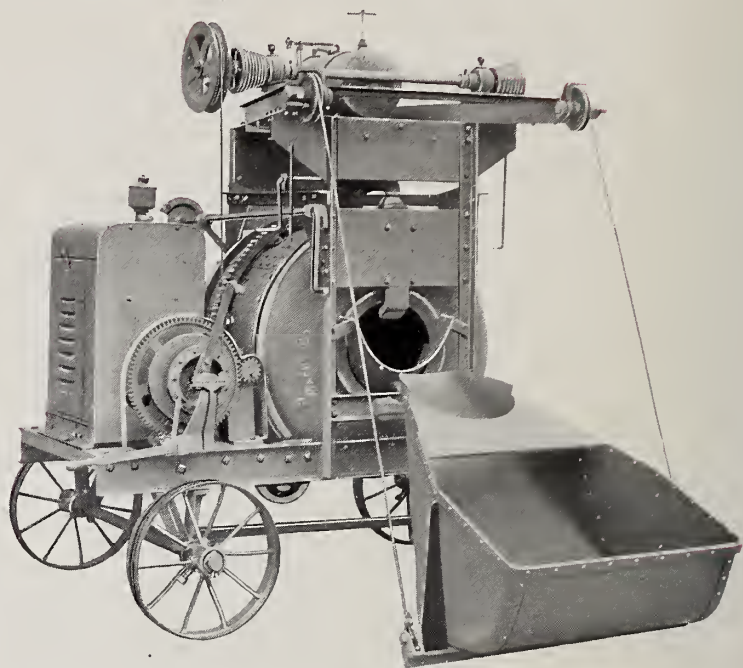


Fig. A-16.—London Concrete Mixer, No. 9-S with Gasoline Engine, viewed from charging side. **Note**—The operator can discharge the machine by the operation of a lever on the charging side, when equipped as shown.

The Construction is modern in every particular. Trucks, standard tread; large steel wheels, heavy beams; steel bed plate; heavy overhung top frame; ball joint bearings on windlass shaft; heavy hoist brakes; separate cable drums; loader with rounded corners; drum treads and rolls of car-wheel steel, chilled hardened. All rivets hot driven with cone head; lock-washers on all bolts. Built up to a high standard in every detail, insuring long life and excellent service.

Power Used. The illustrations herein are of the machine equipped with 9 H.P. Novo Two Cylinder Gasoline Engine with High Tension Magneto and covered with Steel House. It has 30 per cent. more power than is required. This is a high-grade, self-contained engine. It is dust-proof and self-oiling and

will run continuously with little attention, making a very suitable power. We also build this machine with steam or electric power.

The Power Loader on London Mixers raises very high, making a clean, quick discharge without spilling. It takes one-third less power than loaders commonly used, because, the cable drums, being cone-shaped, equalizes the engine load keeping it practically the same from the time the loader leaves the ground until it reaches the top. The overhung top frame brings the cable sheaves directly over the loader, preventing strain on the machine and making the load easier to lift. It also permits the loader to go up full height and increases the charging speed. These features place the London Concrete Mixer in a class by itself.

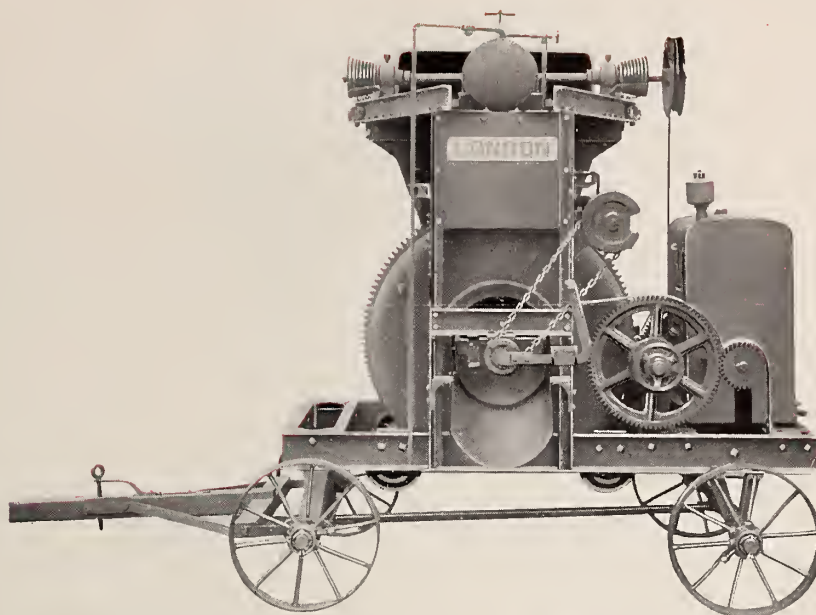


Fig. A-17.—London Concrete Mixer, No. 9-S, viewed from the discharge side, showing upper chute reversed, in position as when discharging the batch. By throwing the lever to the left the chute is reversed in the drum and it ceases to discharge.

The Discharge Mechanism is of the rotary type which makes a rapid, clean discharge. All machines can be fitted with two side discharge levers, as shown, one on each side, allowing one man to operate the machine.

The Water Tank is of the same design on all London Concrete Mixers. See page 31. All machines are fitted so that tank can be bolted on at any time, if not ordered with the machine.

A General Purpose Machine. The London No. 9-S is a full $\frac{1}{3}$ cu. yard machine. Contractors everywhere have been asking for a machine of this size. It has proved to be a suitable machine for many classes of work. Big enough for any work which can be done with a portable machine and strong enough to withstand constant use for years.

London Concrete Mixer, No. 9-S.

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0141	On trucks, with Power Loading Hopper, without power, with Pulley or Gear.	3440	4950	166	Emrz
0142	On trucks, with Power Loading Hopper, with 9 H.P. Novo two cylinder Gasoline Engine, Housed.	4115	5600	218	Eyrl
0144	On trucks, with Power Loading Hopper, with Steam Engine only.	3975	5500	218	Ekrx
0145	On trucks, with Power Loading Hopper, with Steam Engine and Boiler.	5065	6660	250	Ewrj
0146	On trucks, with Power Loading Hopper, with Electric Motor, Housed.	on application.			Eirv
0147	Automatic Water Tank, Extra.	110	110		Eurh
0148	Two Side Discharge Levers, Extra.	47	47		Egrt
0014	Rubber-tired, roller-bearing truck wheels, instead of standard steel wheels. Extra.	184	184		Tirs
Deduction					
0149	If trucks not required, deduct for Steel Skids supplied, only.	625	625		Esrf
0049	If Power Loading Hopper not required and Stationary Hopper supplied instead, deduct.	650	650		Eqrd

(See specifications pages 26-27).

London Concrete Mixer, No. 11-S

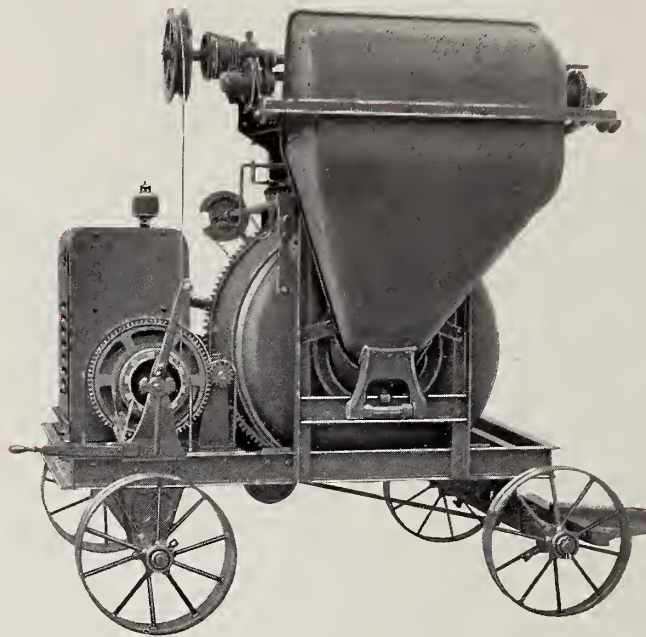


Fig. A-18.—London Concrete Mixer, No. 11-S, showing Power Loader in position as when charging the machine. Look how high the loader raises, passing well between the sheaves, discharging its contents clean and quickly.

The London Concrete Mixer No. 11-S, is a Heavy Duty Portable Machine and is suitable for such work as building reinforced concrete Buildings, Dams, Breakwaters, Grain Elevators, Power Development Plants and heavy foundation work. In fact all kinds of work where up to 13 cu. yards of concrete per hour can be used.

Capacity. The drum will mix 14 ft. of material, proportions: 8 cu. ft. stone, 4 cu. ft. sand and 2 cu. ft. cement; and, under all conditions will hold 11 cu. ft. of mixed concrete without overloading. The machine will mix under average working conditions 13 cu. yards per hour.

The Construction is high grade. All of the London special features are incorporated in this machine. Every part is built of the best material available. The workmanship is the best that a modern shop can produce. The design is one recognized by Engineers as the

most adaptable to present day requirements in the Construction Industry. Not built down to a price, but up to a standard which has made **London Machines** favorably known the world over.

Power Used. This machine as illustrated herein is equipped with Novo 12 H.P. Multiple Cylinder Gasoline Engine, This is an enclosed engine of automobile type. Two cylinders, Throttling Governors running in oil, Automobile carburetor, Splitdorf Magneto, force feed oiling system. Engine covered with heavy Steel House. The power developed is 40% more than is required to operate the machine. We can also supply the outfit equipped with Steam Power using the well known London Steam Engine and Boiler built to meet all regulations. Electric Operated Machines are furnished for direct or alternating current. We use only the best Canadian makes of Electric Motors.

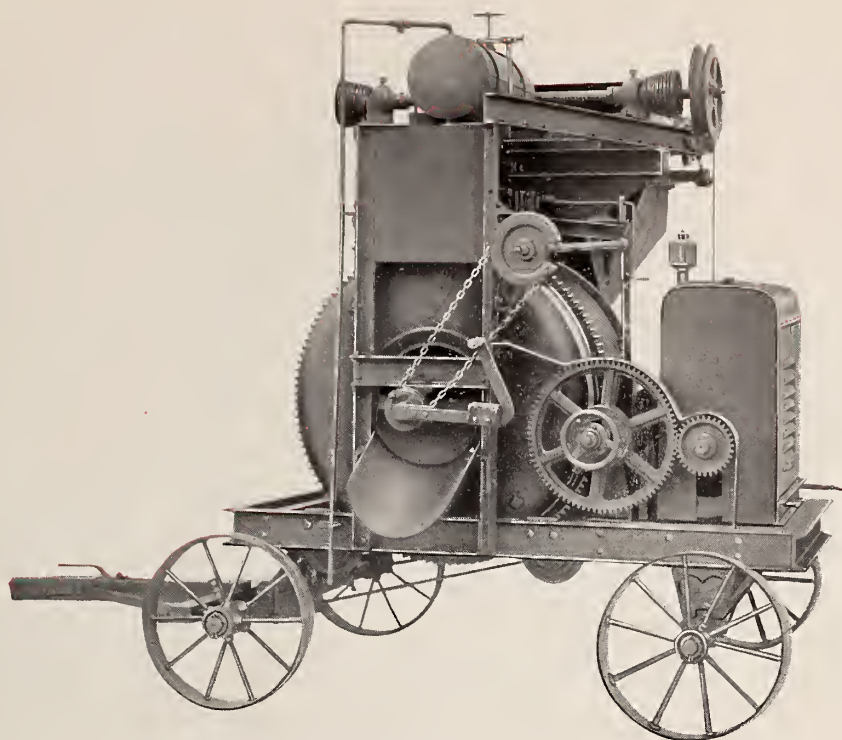


Fig. A-19.—London Concrete Mixer, No. 11-S, viewed from discharge side.

Contractors and Engineers with long experience realize that on any important work it pays to buy the best machine available regardless of the cost. The first cost may be greater but the difference in the earning power will, in the first few weeks' use, more than offset the difference in cost. Then there is the satisfac-

tion of being able to complete the work according to schedule.

Delays mean lost labor, poor concrete work and often serious loss. **London Concrete Mixers** are designed to run day and night, if necessary. Every hour they demonstrate to the user the wisdom of buying on the principle of **quality first**.

London Concrete Mixer, No. 11-S.

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0150	On trucks, with Power Loading Hopper, without power, with Pulley or Gear.	6000	6940	300	Fmsz
0151	On trucks, with Power Loading Hopper, with 12 H.P. Novo Gasoline Engine, Housed.	6420	7560	320	Fysl
0152	On trucks, with Power Loading Hopper, with Steam Engine only.	6005	6850	300	Fksx
0153	On trucks, with Power Loading Hopper, with Steam Engine and Boiler.	7155	8250	340	Fwsj
0154	On trucks, with Power Loading Hopper, with Electric Motor, Housed.	On application.			Fisv
0155	Automatic Water Tank, Extra.	130	130	.....	Fush
0156	Two Side Discharge Levers, Extra.	50	50	.....	Fgst
	Deductions				
0157	If truck not required, deduct for Skids supplied only.	800	800	.....	Fqsd
0158	If Power Loading Hopper not required and Stationary Hopper supplied instead, deduct.	790	790	.....	Fcsp

(See specifications Pages 26-27).

London Concrete Mixer, No. 15-S

The London Concrete Mixer, No. 15-S, is a Heavy Duty Machine built for large work, or where a capacity of up to 180 cu. yards per day can be used. It can be furnished with Power Loading Hopper as illustrated or with Stationary Loading Hopper with gates. (See design, page 22, showing Stationary Hopper).

Capacity. The drum will mix 22 cu. ft. of material, proportions: 12 cu. ft. stone, 6 cu. ft. of sand and 4 cu. ft. cement; and, under all conditions it will hold 15 cu. ft. of mixed concrete without overloading. The machine will mix a batch per minute or under average working conditions, 20 cu. yards per hour.

The Construction is high grade. All the modern improvements as described on previous pages of this catalogue are contained in this machine. Built to last 25 years, if used and not abused.

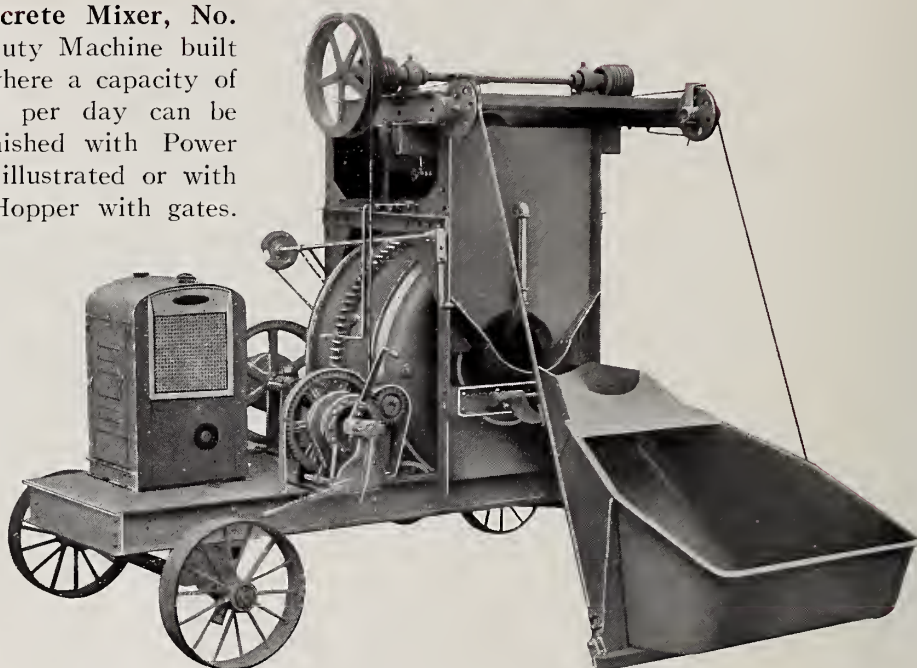


Fig. A-20—London Concrete Mixer No. 15-S, equipped with Multiple Cylinder Gasoline Engine.

Power Used. The illustration on this page shows the machine equipped with 15 H.P. LeRoi Multiple Cylinder Engine, covered with Steel House. On all Steam Driven Outfits we use the well-known London Steam Engine and Boiler. On Electric Operated Outfits we use the best Canadian makes of Electric Motors.

London Concrete Mixer, No. 15-S

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0170	On trucks, with Power Loading Hopper, without power, with Pulley or Gear.	6900	7620	340	Gmtz
0171	On trucks, with Power Loading Hopper, with 15 H. P. LeRoi Gasoline Engine, Housed	7550	8800	360	Gytl
0172	On trucks, with Power Loading Hopper, with Steam Engine only	7600	8650	340	Gktx
0173	On trucks, with Power Loading Hopper, with Steam Engine and Boiler	9300	10465	380	Gwtj
0174	On trucks, with Power Loading Hopper, with Electric Motor, Housed	On application			Gltv
0175	Automatic Water Tank, Extra	150	150	6	Guth
0176	Two Side Discharge Levers, Extra	50	50		Gstl
Deductions					
0177	If trucks not required, deduct for Skids supplied only	1170	1170		Getr
0178	If Power Loading Hopper not required, and Stationary Hopper supplied, instead, deduct	900	900	10	Gqtd

(See specifications, Pages 26-27).

London Concrete Mixer, No. 22-S

The London Concrete Mixer No. 22-S is a Heavy Duty Machine built for work where a capacity of up to 240 cu. yards per day is required. It can be furnished with Power Loading Hopper as illustrated, or with Stationary Loading Hopper with gates. (See designs, pages 22 and 23, showing Stationary Hopper.

Capacity. The drum will mix 32 cu. ft. of material, proportions: 18 cu. ft. stone, 9 cu. ft. sand and 5 bags cement, or, it will hold 22 cu. ft. of mixed concrete without overloading. The machine will mix a batch per minute or under average working conditions, 26 cu. yards per hour.

The Construction is heavy as is demanded of a machine of the capacity herein mentioned. The design is one that gives the greatest strength for the material used. The materials and workmanship are the very best. Like other sizes of London Mixers it is built to maintain the good reputation that they have gained. Every machine is sold with an **absolute guarantee of satisfaction.**

Power Used. This illustration is of the machine equipped with London Steam Engine

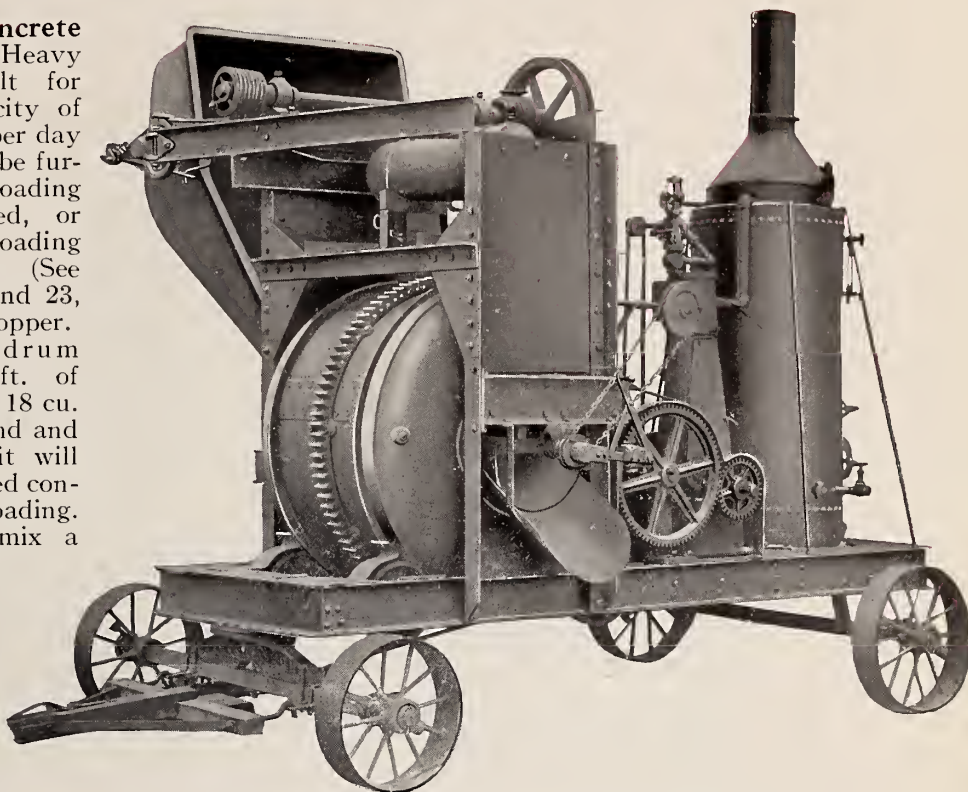


Fig. A-21.—London Concrete Mixer, No. 22, with Steam Power.
Machine viewed from discharging side.

and Boiler, both Canadian made. This design of Engine and Boiler is used on all London Heavy Duty Mixers. When electrically operated we use the best Canadian makes of Motors. On our Gasoline Operated Outfit we use the 18 H. P. Novo Multiple Cylinder Engine, covered with Steel House.

London Concrete Mixer No. 22-S

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0190	On trucks, with Power Loading Hopper, with Pulley or Gear.....	7962	9100	390	Hmuz
0191	On trucks, with Power Loading Hopper, with 18-H. P. Novo Gasline Engine, Housed.....	9100	11250	415	Hyul
0192	On trucks, with Power Loading Hopper, with Steam Engine only.....	9560	10600	390	Hkux
0193	On trucks, with Power Loading Hopper, with Steam Engine and Boiler.....	11260	12600	435	Hwuj
0194	On trucks, with Power Loading Hopper, with Electric Motor, Housed.....	On application.			Hhuv
0195	Automatic Water Tank, Extra.....	160	160	8	Hgut
0196	Two Sided Discharge Levers, Extra.....	50	50	.....	Hsuf
Deductions					
0197	If trucks not required, deduct for Skids supplied only.....	1250	1250	.....	Heur
0198	If Power Loading Hopper not required and Stationary Hopper supplied instead, deduct.....	1070	1070	.....	Hqud

(See specifications pages 26-27.)

London Concrete Mixer No. 30-S

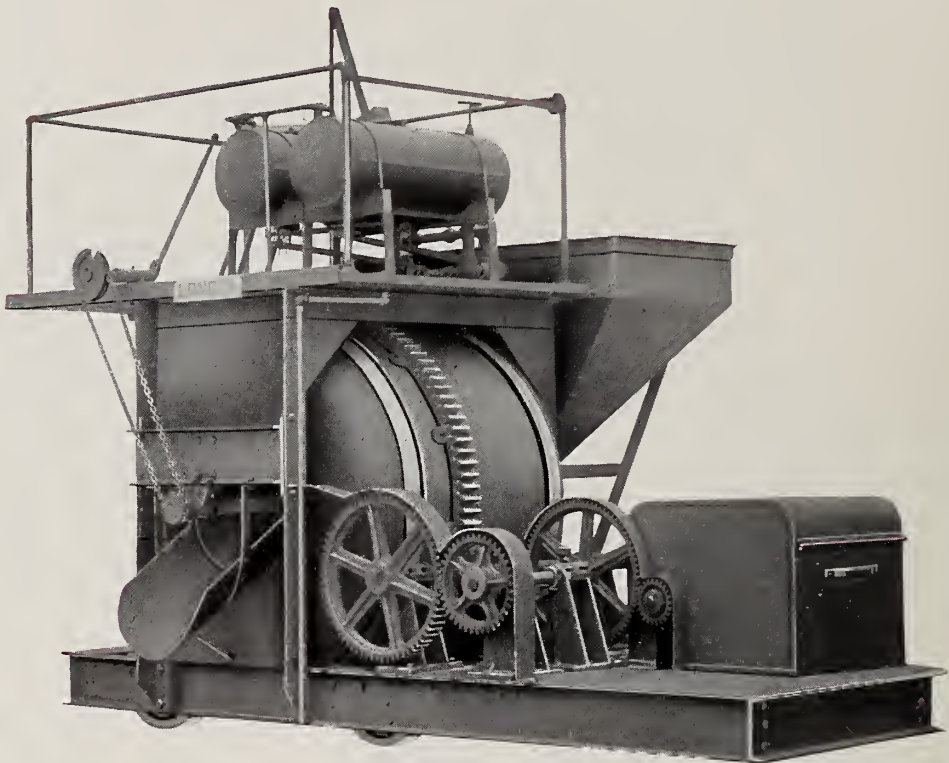


Fig. A-22.—No. 30-S London Concrete Mixer with Stationary Hopper and operator's platform; equipped with electric motor, housed

The London Concrete Mixer, No. 30-S, mounted on steel skids with Stationary Loading Hopper, as illustrated, is in demand for work where the machine can be loaded with clam shell or from storage bin, or direct from cars.

Capacity. The drum will mix 46 cu. ft. of material, proportions: 26 cu. ft. stone, 13 cu. ft. sand and 7 bags cement; and, under all conditions it will hold 30 cu. ft. of mixed concrete without overloading. The machine will mix a batch per minute or under average work-

ing conditions will mix 40 cu. yards of concrete per hour.

The Construction is modern. Wide opening gate in loading hopper; quick opening water tank valve; all levers grouped together; adaptable to be operated from the ground or from platform above machine as required. The machine can be furnished either with or without platform with either hand or power discharge mechanism. Suitable for all kinds of construction work. Built to last a lifetime. Complete specifications and blue prints mailed on request

London Concrete Mixer, No. 30-S, On Skids

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
0210	With Stationary Loading Hopper, without power, with Pulley or Gear.....	8400	10500	617	Imvz
0211	With Stationary Loading Hopper, with 25 H.P. Novo Multiple Cylinder Gasoline Engine, Housed.....	9600	12500	675	Iyvl
0212	With Stationary Loading Hopper, with Steam Engine, only.....	10350	12300	757	Ikvx
0213	With Stationary Loading Hopper, with Steam Engine and Boiler.....	12750	15500	815	Imyh
0214	With Stationary Loading Hopper, with Electric Motor, Housed.....	On application			Igyt
0215	Automatic Water Tank, Extra.....	225	225		Isvf
Deduction					
0216	If Platform not required, deduct.....	500	800		

(See specifications, pages 26-27.)

London Concrete Mixers—Nos. 42-S and 56-S

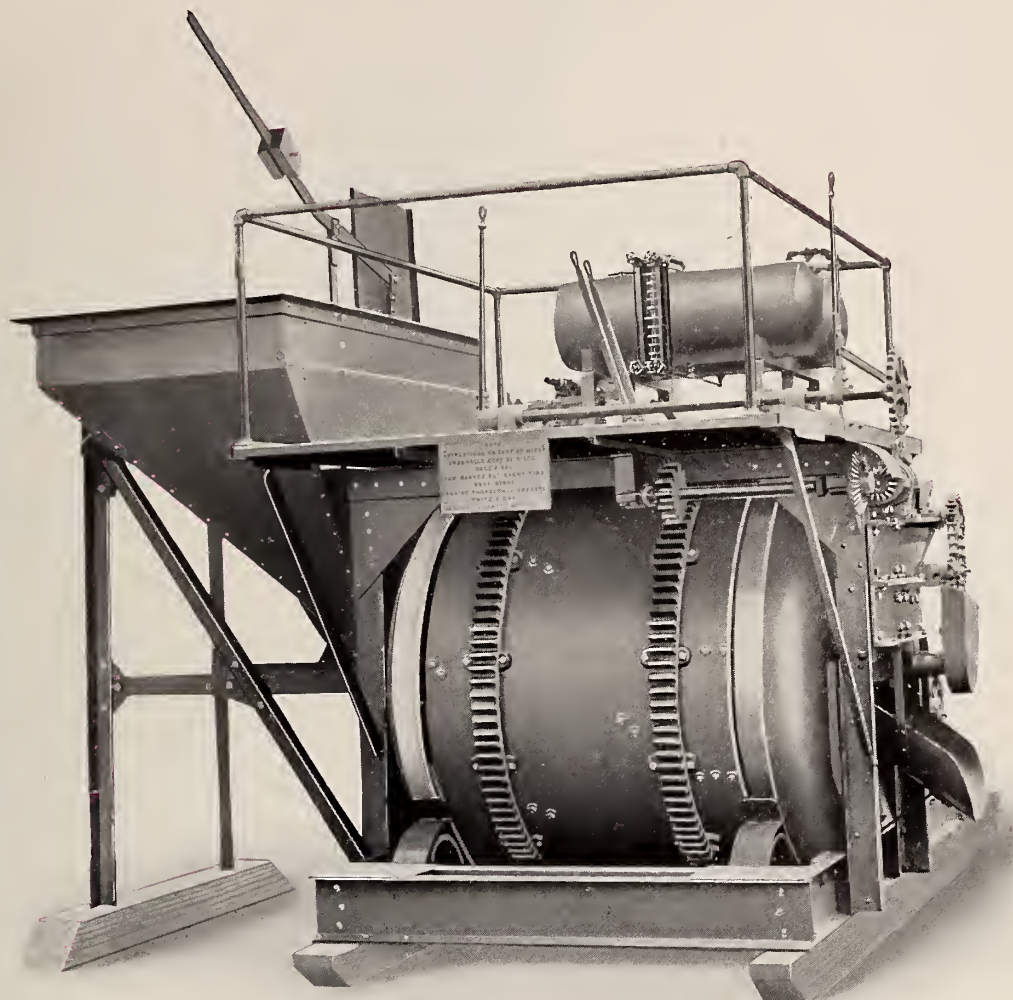


Fig. A23. London Concrete Mixer No. 42-S, fitted for Electric Motor, equipped with Power Discharge mechanism.

The illustration on this page is from an actual photograph of London Concrete Mixer No. 42-S. No. 56-S is of the same general design and construction but proportioned larger.

Capacity. The No. 42 has a capacity of 60 cu. ft. of unmixed material or $1\frac{1}{2}$ cu. yards of mixed concrete per batch.

The No. 56-S has a capacity of 80 cu. ft. of unmixed material, 2 cu. yards of mixed concrete per batch.

These Mammoth Concrete Mixers have every modern convenience, and are controlled by one man. They are built to do rapid and thorough work with low operating cost, and their sturdy construction makes them good for constant use for almost a life-time. Every machine is guaranteed to mix one million batches and still be in good condition.

Complete particulars with blue prints and specifications on request.

London Paving Mixers

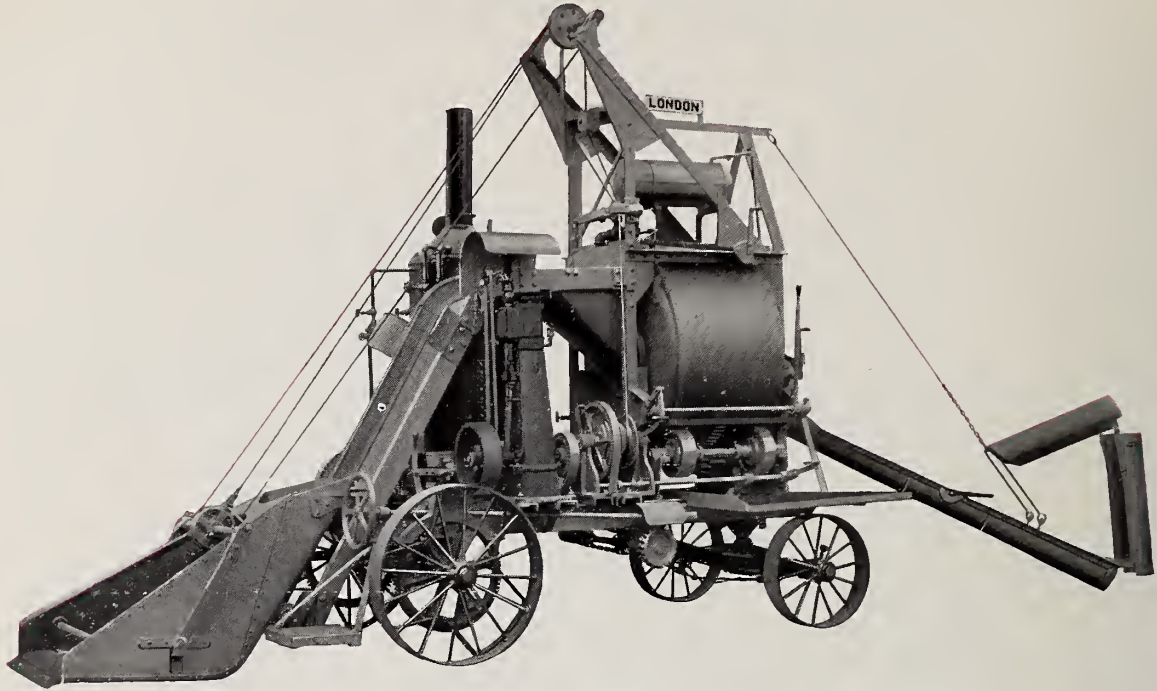


Fig. A-25—No. 11-S equipped with Steam Power. Viewed from operator's side.
Note—All levers are grouped together.

London Paving Mixers are made in two sizes, Nos. 11-S and 16-S. They are different from any other paving mixer inasmuch as they were designed distinctively as machines in which the concrete is delivered to the Roadway by a Chute, which swings in a half circle, depositing the Mixed Concrete to any part of the roadway. They, therefore, have many advantages over machines designed to be used with Boom. They weigh less, are more easily handled, have larger capacity and do equally good work, and cost less to purchase and maintain.

Capacity. The No. 11-S Machine has a capacity of 11 cu. ft. of mixed concrete per batch, or 13 cu. yards per hour. The No. 16-S has a capacity of 16 cu. ft. of mixed concrete per batch, or 20 cu. yards per hour. These capacities are based on mixing 40 batches per hour; many contractors exceed these capacities per hour by 25%.

All Levers are grouped together on the side of the machine where the engine is mounted, every lever being in reach of the operator. It, therefore, only requires one man to run the machine.

The Power Loading Hopper which operates in advance of the machine, allows the machine to work on a narrow roadway, also insures an evenly balanced load at all times, a very important feature in any machine operated with traction drive.

The Elevated Drum is a distinctly modern feature not contained in any other machine

made. A glance at the above illustration is self-explanatory. The higher the drum is raised from the ground the greater the descent of the concrete as it is discharged from the drum. It is impossible to use a delivery chute with the ordinary type of mixer as the drum is set too low down, but where the elevated drum is used there is no difficulty in securing a continuous flow of concrete down the delivery chute when the machine is discharging.

A Rear Discharge is always desirable in a machine for street paving as it takes up less room on the roadway than a machine with side discharge.

The Rotary Delivery Chute has solved the problem of quick delivery of the concrete to any part of the roadway. This chute swings in a complete half circle. The chute is provided with gates which open up at different points making it possible to deposit the concrete close to the machine, or at any point within the radius of the chute, thus delivering the concrete to any part of the roadway in a continuous stream.

The Traction Drive is of sliding gear type, both forward and reverse. It is equipped with traction on each side, which may be used separately or both together, the traction is provided with friction clutch so that the machine may be started up as slowly as desired. This machine will travel on any ordinary roadway at two miles per hour.



Fig. A-26—No. 11-S equipped with Multiple Cylinder Gasoline Engine. Machine viewed from rear side.

Power Used. We build Paving Mixers equipped with Steam, Gasoline or Electric Power. See description of Gasoline Engines; in Catalogue No. 32-E.

The London Paving Mixers produce just the right kind of concrete for road building, a homogeneous, creamy mixture, which will flow down the chute freely under all conditions—a kind of mixture which does not separate, the ingredients being well mixed and equally distributed.

The Construction is high grade throughout, the materials are the best obtainable. All parts subject to wear are espe-

cially heavy. The design is such that there are few parts to wear out, in fact our machines are running for years without repairs. The cost of upkeep on these machines is small because they are built to stand long and hard service.

Contractors having large work have proved without doubt that The London Paving Mixers will lay pavement more rapidly than machines of similar size, doing first-class work, at a considerable less cost for labor and plant upkeep; and, they have been more than able to compete with those using other types of machines—every machine sold has given absolute satisfaction—every customer has given them the very highest praise.

London Paving Mixers

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
230	No. 11-S with 14-ft. Chute, Steam operated.....	10225	12225	500	Juwh
230½	No. 11-S, with 14-ft. Chute, with 12 H.P 2-Cylinder Novo Gasoline Engine, Housed.....	9075	10975	510	Jgwt
231	No. 16-S, with 14-ft. Chute, Steam operated.....	13780	15000	765	Jswf
231½	No. 16-S, with 14-ft. Chute, with 18 H.P. Novo Gasoline Engine, Housed	11550	14150	750	Jewr
232	Extra Chute, per ft.....	50	50	.....	Jqwd

(See specifications, pages 26-27.)

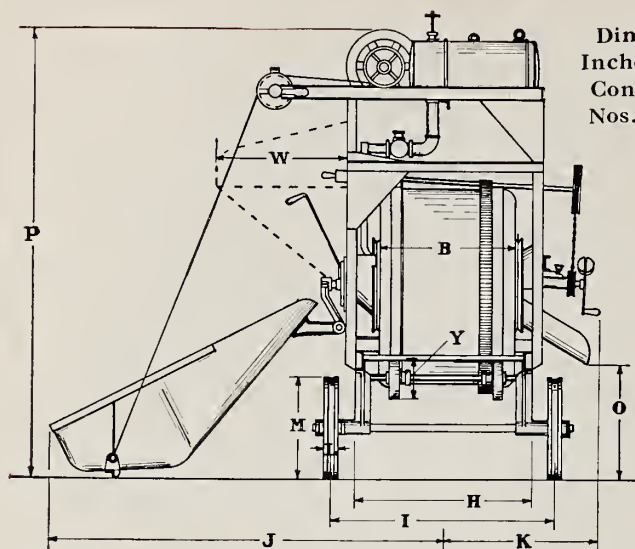
Specifications of London Standard Building Mixtures

Description	No. 4		No. 6		No. 7-S		No. 9-S		No. 11-S		No. 15-S		No. 22-S		No. 30-S	
	5½ cu.ft. 3½ cu.ft. 4 cu.yds.	20"x2" 20"x2" 6"	8½ cu.ft. 5½ cu.ft. 6 cu.yds.	20"x3" 20"x3" 6"	10 cu.ft. 7 cu.ft. 9 cu.yds.	20"x4" 20"x4" 6"	12½ cu.ft. 9 cu.ft. 10 cu.yds.	24x4" 24x4" 7½"	14 cu.ft. 11 cu.ft. 13 cu.yds.	24x5" 28x5" 9½"	22 cu.ft. 15 cu.ft. 20 cu.yds.	32 cu.ft. 22 cu.ft. 26 cu.yds.	24x8" 28x8" 9½"	24x8" 28x8" 9½"	46 cu.ft. 30 cu.ft. 40 cu.yds.	46 cu.ft. 30 cu.ft. 40 cu.yds.
Trucks—																
Diameter and width of front wheel, inches.....	20"x2"	20"x3"	20"x3"	20"x3"	20"x4"	20"x4"	24x4"	24x4"	24x5"	24x5"	22 cu.ft.	32 cu.ft.	24x8"	24x8"	46 cu.ft.	46 cu.ft.
Diameter and width of rear wheel, inches.....	20"x2"	20"x3"	20"x3"	20"x3"	20"x4"	20"x4"	24x4"	24x4"	28x5"	28x5"	15 cu.ft.	22 cu.ft.	28x8"	28x8"	30 cu.ft.	30 cu.ft.
Length of Hub, inches.....	6"	6"	6"	6"	6"	6"	7½"	7½"	7½"	7½"	20 cu.yds.	26 cu.yds.	9½"	9½"	40 cu.yds.	40 cu.yds.
Gauge of wheels.....	44½	44½	44½	44½	44½	44½	58	58	62½	62½			73½	73½		
Front axle, steel, diameter.....	1½"r	1½"r	1½"r	1½"r	1½"r	1½"r	2"r	2"r	2¼"sq	2¼"sq			2¾"sq	2¾"sq		
Rear axle, steel, diameter.....	1½"r	1½"r	1½"r	1½"r	1½"r	1½"r	2"r	2"r	2¼"sq	2¼"sq			2¾"sq	2¾"sq		
No. 4, 6 and 7-S has pulling bale, larger sizes, team pole.																
Frame—																
Length and width, inches.....	61x35¾	73x35¼	81x35¼	81x35¼	81x35¼	81x35¼	87¾x41¾	124x46¼	124x46¼	124x46¼	148½x50½	148½x54½	148½x54½	148½x54½	173¾x64¾	173¾x64¾
Sills, size of material and weight per ft.....	3x2"AI	5" Chan.	5" Chan.	5" Chan.	5" Chan.	5" Chan.	6" Chan.	7" Chan.	7" Chan.	7" Chan.	8" Chan.	8" Chan.	8" Chan.	8" Chan.	10" Chan.	10" Chan.
Cross members, size of materials and weight per ft.....	5 lbs.	6¼ lbs.	6¼ lbs.	6¼ lbs.	6¼ lbs.	6¼ lbs.	9 lbs	10½ lbs	10½ lbs	10½ lbs	13¾ lbs	13¾ lbs	13¾ lbs	13¾ lbs	20 lbs	20 lbs
Plate under power plant.....									¼"	¼"	¼"	¼"	¼"	¼"	¼"	¼"
Drum—																
Diameter and width, inches (inside).....	32x23½	38"x27"	42x27"	42x27"	42x27"	42x27"	42x33"	48x36"	48x36"	48x36"	54x40"	60x44"	60x44"	60x44"	65½x54"	65½x54"
Size of opening, inches, charging side.....	14"	14"	16"	16"	16"	16"	18"	18"	18"	18"	20"	20"	20"	20"	22"	22"
Size of opening, inches, discharging side.....	14"	14"	16"	16"	16"	16"	16"	16"	16"	16"	20"	20"	20"	20"	20"	20"
Thickness of Drum Sheet (H. C. Steel).....	12 Ga.	12 Ga.	10Ga	10Ga	10Ga	10Ga	10Ga	10Ga	10Ga	10Ga	¼"	¼"	¼"	¼"	¼"	¼"
Thickness of Drum Heads (car wheel Steel).....	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
Number of Blades.....	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Buckets.....	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8	8
Drum Ring Gear, face, inches.....	1½"	2"	2½"	2½"	2½"	2½"	2½"	3"	3"	3"	3½"	3½"	3½"	3½"	4"	4"
R. P. M. of Drum.....	20	19	18	18	18	18	18	17	17	17	16	15	15	15	14	14
Width of Track.....	1½"	2"	2"	2"	2"	2"	2"	3"	3"	3"	3½"	3½"	3½"	3½"	4½"	4½"
Drum Driving Mechanism—																
Drum Pinion, No. of Teeth and face.....	13T-1½"	12T-2"	12T-2½"	12T-2½"	12T-2½"	12T-2½"	12T-2½"	12T-3"	12T-3"	12T-3"	12T-3½"	12T-3½"	12T-3½"	12T-3½"	12T-4"	12T-4"
Countershaft speed, R. P. M.....	175	185	192	192	192	192	202	155	155	155	133	137	137	137	124	124
Countershaft diameter, inches.....	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	2½"	2½"
Countershaft Bearings, babbitted, length inches.....	3"	4"	5"	5"	5"	5"	5"	5¼"	5¼"	5¼"	6"	6"	6"	6"	8"	8"
Lubrication, compression grease cups, on all Bearings.....																

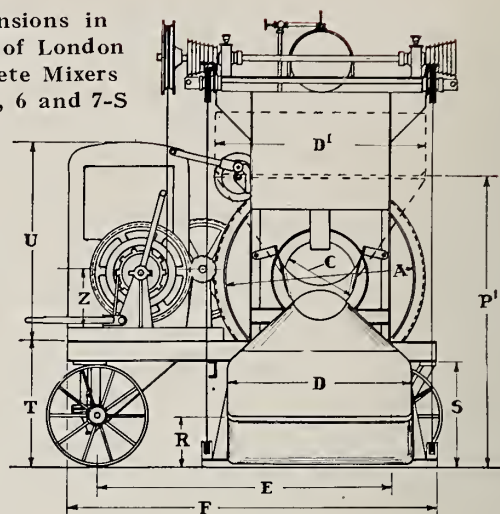
Description	No. 4	No. 6	No. 7-S	No. 9-S	No. 11-S	No. 15-S	No. 22-S	No. 30-S
Supporting Frame— Size of Upright Angle, charging side Size of Upright Angle, discharging side Size of Top Channels, supporting sheaves Size of Cross Members, angle iron	1½x1½" 1½x1½" 1½x1½"	1¾x1¾" 1¾x1¾" 3" 1¾x1¾" 2x2"	2x2" 1¾x1¾" 3" 2x2"	2½x2½" 2x2" 4" 2x2"	3x3" 2½x2½" 5" 3x3"	4x3" 3x3" 6" 4x3"	4x4" 4x3" 6" 4x3"	4x4" 4x4" 5x3½"
Drum Rolls, Self Lubricating— Diameter of Roll and width of tread, inches Length of Bearing	6½x1½" 5"	9x2" 6½"	9x2" 6½"	9x2" 6½"	12x3¼" 8⅞"	14x3½" 8"	16x3¾" 8"	18x4½" 12"
Discharge Chute— Lower Chute thickness Upper Chute thickness Upper Chute, shaft diameter	12Ga 12Ga 1½"	12Ga 12Ga 1½"	10Ga 10Ga 1½"	¾" ¾" 1½"	¾" ¾" 1½"	¾" ¾" 1½"	¾" ¾" 1½"	¾" ¾" 1½"
Stationary Loading Hopper— Capacity Thickness of Plates Angle of Hopper	5½ cu.ft. 14Ga. 36°	8½ cu.ft. 12Ga. 36°	10 cu.ft. 12Ga. 36°	11 cu.ft. 12Ga. 45°	14 cu.ft. 10Ga. 45°	22 cu.ft. 10Ga. 45°	32 cu.ft. 10Ga. 45°	46 cu.ft. 10Ga. 45°
Power Loading Hopper— Capacity Thickness of Plate Width at charging end Depth at charging end on closed Hopper Cables (Pliable Steel) diameter Winding Spool, Conical and Grooved Diameter of Winding Spool Shaft Winding Spool Shaft Bearings, Ball and Socket type	8½ cu.ft. 12Ga. 37" 10" ¼"	8½ cu.ft. 12Ga. 37" 10" ¼"	10 cu.ft. 12Ga. 37" 10" ¼"	11 cu.ft. 12Ga. 38" 13" ⅝"	14 cu.ft. 10Ga. 42" 13" ⅝"	20 cu.ft. 10Ga. 48" 15" ⅞"	30 cu.ft. 10Ga. 54" 18" ⅞"	46 cu.ft. 10Ga. 54" 18" ⅞"
Water Measuring Tank— Diameter and length (see page 26) Gallons Capacity, 200 lbs. pressure, U.S. Diameter of Opening Size of Relief Valve Self-Measuring, also Sight Feed	12x24" 12 1½" ½"	12x24" 12 1½" ½"	12x24" 12 2" ½"	12x24" 12 2" ½"	12x30" 15 2" ½"	12x36" 17½ 2" ½"	14x40" 26½ 2" ½"	2-18x40" 88 2" ½"
Power— H.P. of Gasoline Engine H.P. of Steam Engine H.P. of Steam Boiler H.P. of Electric Motor	2-3	3-4	6	9 5 6 5	12 6 7 5	15 8 10 7½	18 12 12 10	25 14 16 15

Blue Prints giving full details on any size Concrete Mixer will be sent on request.

Dimension Sheet

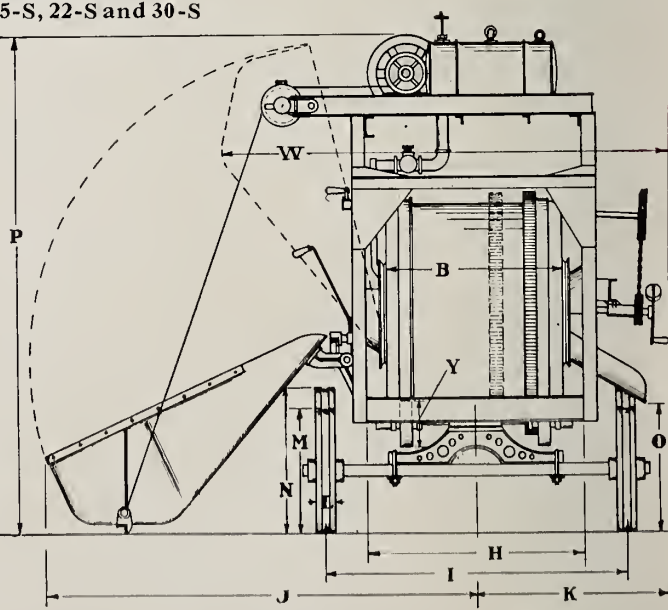
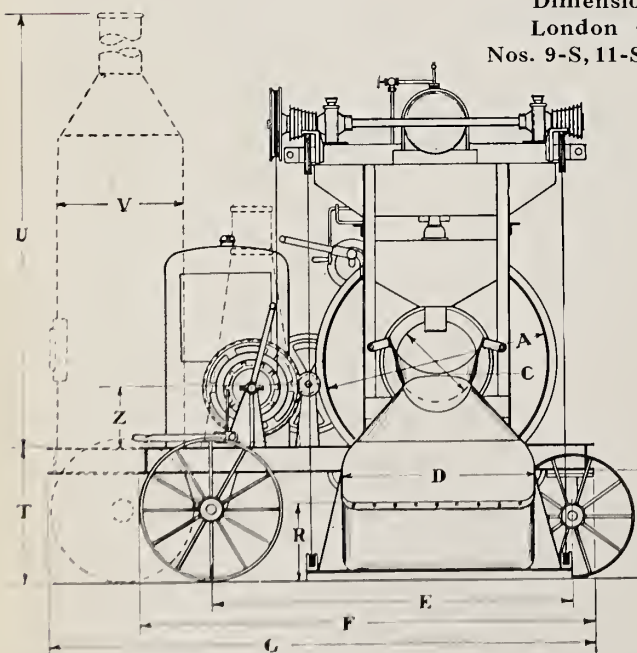


Dimensions in
Inches of London
Concrete Mixers
Nos. 4, 6 and 7-S



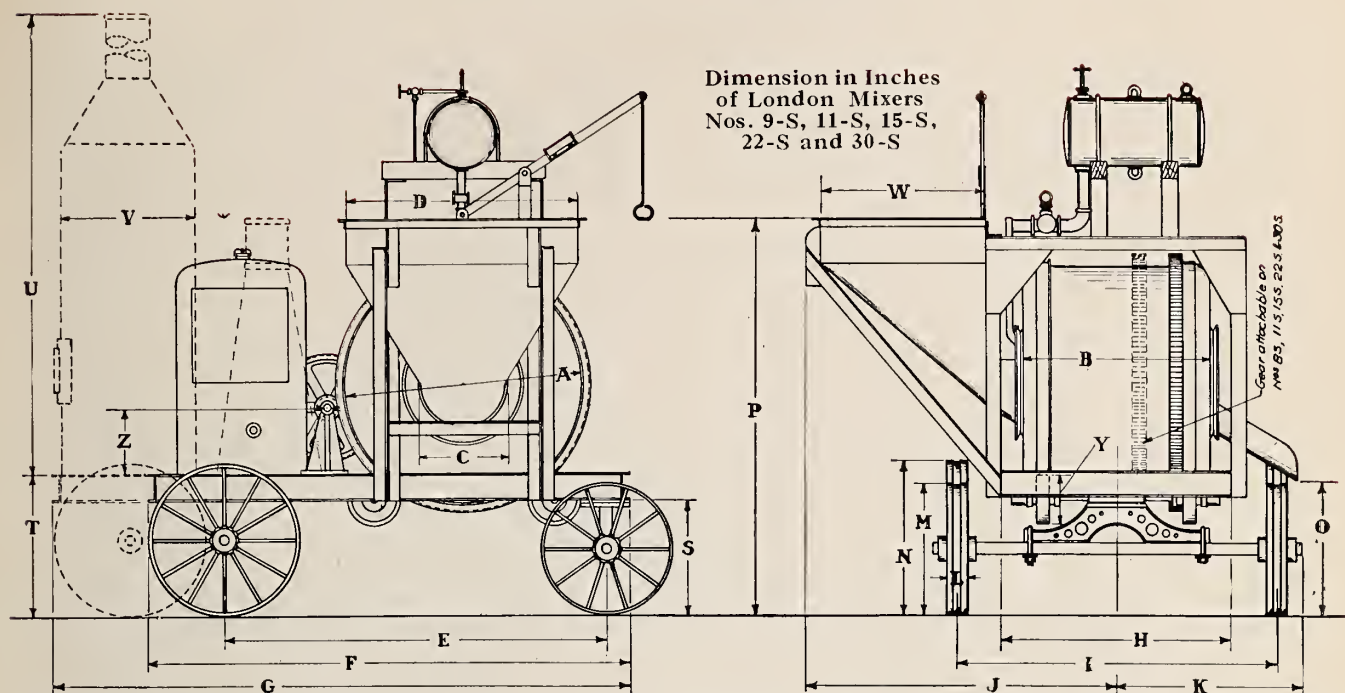
Mixer	A	B	C	D ¹	D	E	F	H	I	J	K	L	M	O	P	P ¹	R	S	T	U	W	Y	Z
No. 4	32	23½	14	....	41	47¾	61	35½	43¾	....	....	2	20	22½	....	48	....	21	24	33	21	7	10
No. 6	38	27	14	37	41	58½	73½	35½	44½	78	32¾	3	20	21	90	51	10	21	25	36	26	9	12
No. 7S	42	27	16	37	41	66½	81½	35½	44½	78	32¾	4	20	21	90	54	12	21	25	39	26	9	12

Dimensions in Inches of
London Concrete Mixers
Nos. 9-S, 11-S, 15-S, 22-S and 30-S

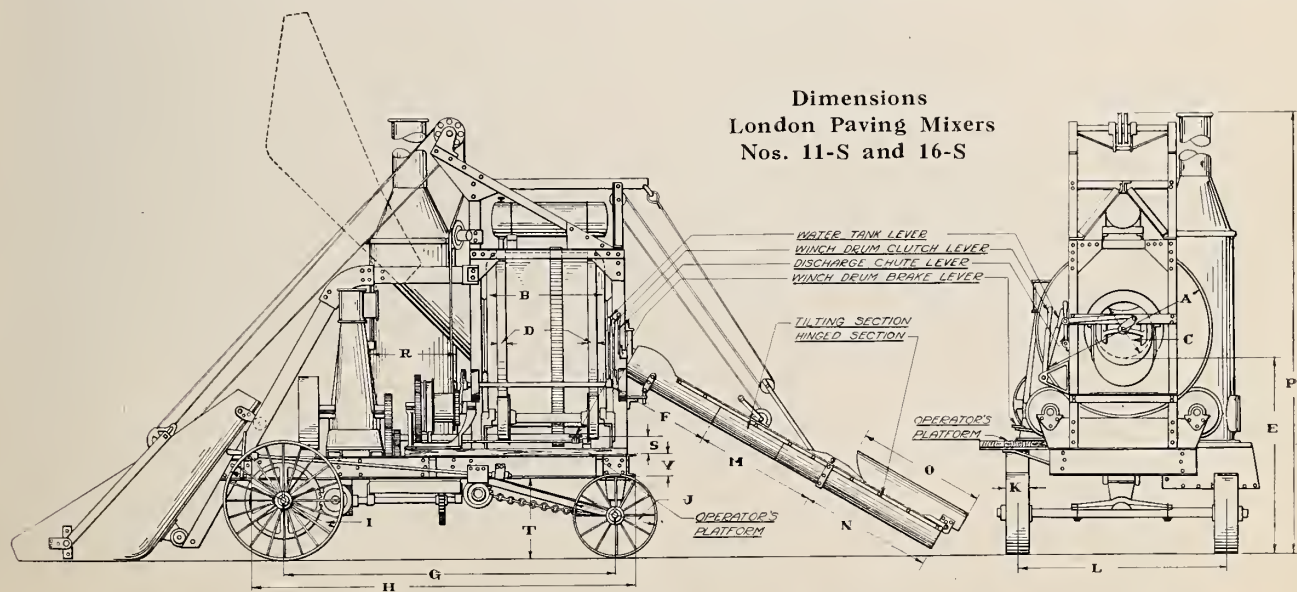


MIXER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	Y	Z
No. 9S	42	33	16	37	69½	88	105½	41¾	58½	83	37½	4	24	24	25	96	15	21	26	96	24	86	10	12
No. 11S	48	36	16	42	72	98	124	46¾	62½	94	38½	5	24	24	25	115½	15	21	27	104	26	95	12	13½
No. 15S	54	40	20	48	123	134½	148½	50½	73½	109½	40½	6	24	28	30	125½	18	21	29	112	30	103	14	15½
No. 22S	60	44	20	54	123	134½	148½	54½	77½	121½	47½	6	24	28	32	133	21	21	29	118	30	111½	16	15½
No. 30S	65½	54	22	....	141	150	174	65	81	....	....	8	24	28	33	....	....	21	31	142	34	....	18	15½

Dimension Sheet



MIXER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	S	T	U	V	W	Y	Z
No. 9S	42	33	16	42	69½	88	105½	41¾	58¼	54	34½	4	24	24	25	72	21	26	96	24	30	10	12
No. 11S	48	36	16	46	72	98	124	46¼	62½	56	36½	5	24	24	25	75	21	27	104	26	30	12	13½
No. 15S	54	40	20	48	123	134½	148½	50½	73½	64	42¼	6	24	28	30	87	21	29	112	30	36	14	15½
No. 22S	60	44	20	54	123	134½	148½	54½	77½	64	44¼	6	24	28	32	92	21	29	118	30	36	16	15½
No. 30S	65½	54	22	69½	141	150	174	65	81	73	49	8	24	28	33	109	21	31	142	34	36½	18	15½



MACHINE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	Y
NO 11 PAYER	46	31½	16	2½	62	45	107	122	40	28	6	69	45	43	40	137	26	9	27	6
NO 16 PAYER	56	40½	20	3	66	45	109	125½	40	28	8	71½	45	48	43	135	30	7½	27	10

London Sidewalk Mixer, No. 11-S

The London Sidewalk Mixer is designed especially for laying Sidewalks. It has a capacity of 11 cu. ft. of mixed concrete per batch, or 13 cu. yards per hour.

On Large Contracts for laying Sidewalks this machine is preferred over any other type of Mixer. It will save considerable in labor and will also permit a greater amount of work to be done in a season.

This Machine has a Traction Drive. It moves itself along the roadway by its own power at about two miles per hour, and will travel either forward or backward. As the machine moves along the main roadway the concrete is delivered to the sidewalk in a continuous stream.

An Elevated Drum. The drum is set very high up, permitting the delivery chute to have sufficient grade to insure an easy flow of mixed concrete. The chute turns in a complete half circle. It also has three gates and, therefore, will deliver the concrete to any point within



Fig. 801.

reach of the chute. The sidewalk may be as much as two feet above the level of the main roadway without affecting the operation of the machine.

All Levers are Grouped Together so that one man can operate the machine. **The Construction** of this machine throughout is very high grade. It is built to run continuously without repairs.

We Guarantee that this machine will save 10% in labor over other types of mixers on any contract of sufficient size to warrant the use of a traction-driven machine. We gladly furnish the names of large cities now using these machines, to any person interested.

Power Used. We use Novo 12 H.P. Two-Cylinder Gasoline Engines on all gasoline operated outfits. The engine is equipped with Magneto, and covered with Steel House. We can also supply this machine equipped with Electric Motor.



Fig. 800.

London Sidewalk Mixer

Outfit No.	Description	Weight	For Export		Code
			Weight Boxed	App. Cu. Ft. space	
236	London, No. 11-S, Sidewalk Mixer, equipped with 12 H.P. Novo Gasoline Engine and 14-ft. Chute	9513	12000	560	Jmwz
237	Rotary Chute, extra per foot	50	50	.....	Jyw1

(See specifications, pages 26-27.)

London Automatic Pressure Water Tanks for London Mixers

London Automatic Pressure Water Tanks are recommended for use on London Concrete Mixers when the Concrete Mixer is used for Town or City work, or on any job where the water can be supplied from a Hydrant giving a pressure of not under 20 pounds to the square inch.

This is a Self-Measuring Tank. It can be set to discharge any desired quantity of water per batch. The water is discharged from the

tank almost at City Pressure. The quantity of water for any single batch of concrete may be decreased at the will of the operator by reversing lever thus closing off the discharging valve, or it may be increased by giving the lever an extra pull. This feature is a very desirable one.

There is also a Glass Water Gauge on all London Automatic water tanks, so that the operator can at all times see in the glass the exact amount of water supplied to the batch.

All Tanks are made by the electric weld process and are tested to 200 pounds pressure. These tanks are built in sizes to suit all sizes of London Concrete Mixers.

Description of Illustrated Features

- A—Air Valve to admit air to Tank, which forces water out quickly.
- B—Stuffing Box for adjusting Rod.
- C—Adjusting Rod for regulating Adjustable Water Tube.
- D—Note—Water in Tank cannot be discharged to a point lower than top of Adjustable Water Tube.
- E—Adjustable Water Tube which may be set to permit the discharge of any portion of the contents of the Tank. Rod C holds the tube at any desired position. When the lever is in position L the water passes through the Water Tube, thus filling the Tank. When the lever is in position J the water is discharged from the Tank through Water Tube, but not lower than the top of the Tube.
- F—Discharge Pipe in which is inserted the Adjustable Water Tube.
- G—Three Way Valve operated by Lever L.
- H—Supply Pipe to attach hose for water supply.
- I—Steel Frame to fasten Tank to Frame of Mixer.
- J—Position of Discharge Lever when Tank is being discharged.
- K—Discharge Pipe which is connected to the Mixer Frame and delivers the water to the Mixer Drum.
- L—Lever to operate three way valve, discharging or refilling the tank.
- M—Glass Water Gauge, showing level of water in the tank.

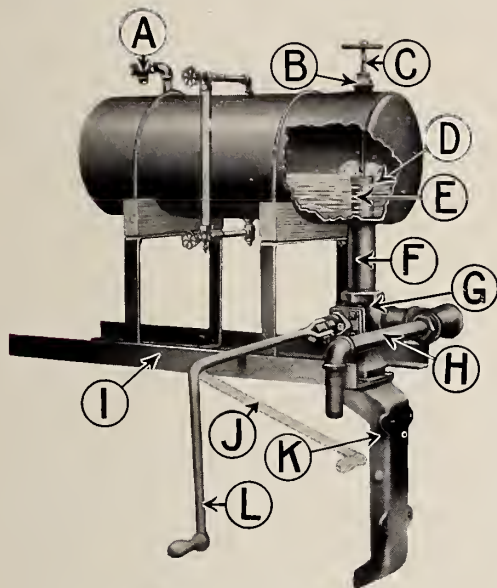


Fig. 15—Automatic Water Tank.

Tank and Pump Combination for London Mixers

This Combination of Pump and Water Tank is recommended for use on London Concrete Mixers where the Concrete Mixer is to be used for Country work or any class of work where the water may be pumped from a creek, tank wagon or other supply.

It has an Indicator showing the water lever, so that the quantity of water for each batch can be gauged definitely.

The Rotary Pump will draw water 25 feet vertically or 200 feet horizontally.

The Water Tank is large enough to hold sufficient water to wet several Batches of Concrete. These Combination Pumping Outfits are built in sizes to suit all sizes of London Concrete Mixers.

Description of Illustrated Features

- M—Water Level Indicator. Note.—The arrow on end of Rod points to water level.
- N—Graduating Scale indicating gallons of water discharged.
- O—Discharge Pipe from Rotary Pump to Water Tank.
- P—Float which operates Water Level Indicator.
- R—Rotary Pump to draw water from any supply.
- S—Suction Pipe of Pump to which Hose is attached.
- T—Regulating Valve to regulate the capacity of the Pump.
- U—Position of Lever W., when water is being discharged into the Mixer Drum.
- V—Discharge Pipe which is connected to the Mixer Frame and delivers the water to the Mixer Drum.
- W—Lever for operating Water Valve, thus supplying water to the Concrete Mixer.
- X—Sprocket Chain which connects Rotary Pump to countershaft of Concrete Mixer.

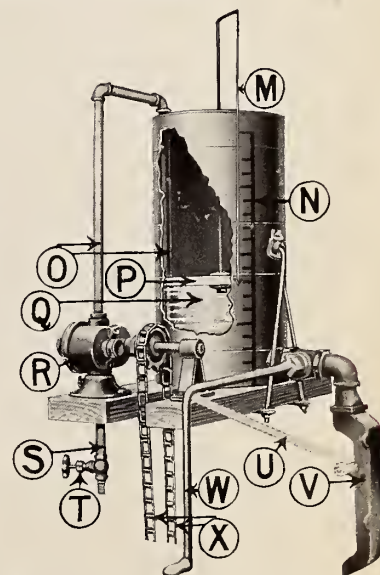


Fig. 16.—Tank, and Pump Combination.

Ideal Tilter Mixers

The Ideal Tilter Mixers, open drum type, are made in two sizes. No. 3 has a capacity of 3 cu. ft. of mixed concrete per batch; No. 3½S has a capacity of 3½ cu. ft. per batch, or, a full half bag Mixer under all conditions.

These two popular size Machines are put up on skids with pulley for hand operation or belt drive; on two-wheel trailer truck, with spring axle brackets; with two steel truck wheels, or, with rubber-tired, roller-bearing wheels, as illustrated in Fig. 817A.A.; also on four-wheel truck as illustrated in Fig. 8120.

Power. No. 3 is equipped with 1½ H.P. Novo Engine. No. 3½ is equipped with 2 H.P. Novo Engine. Heavy steel house over engine and magneto are standard equipment.

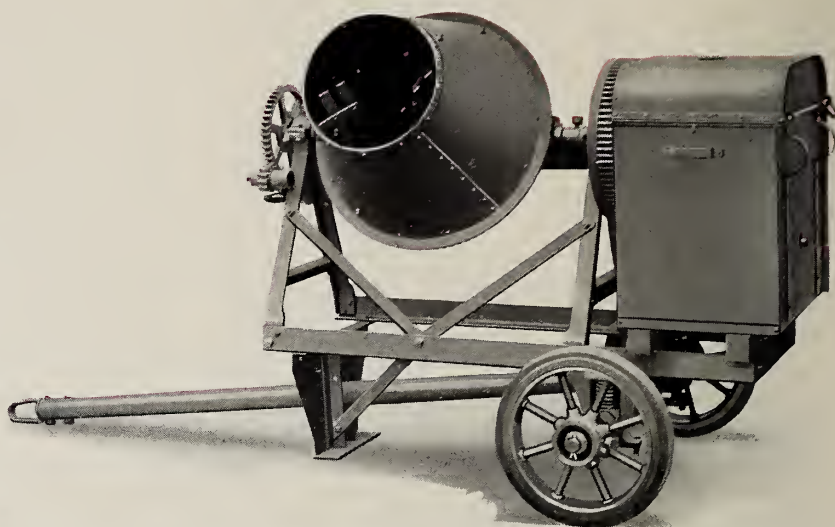


Fig. 817A-A Ideal Trailer No. 3 or 3½S with Rubber-Tired, Roller-Bearing Truck Wheels.

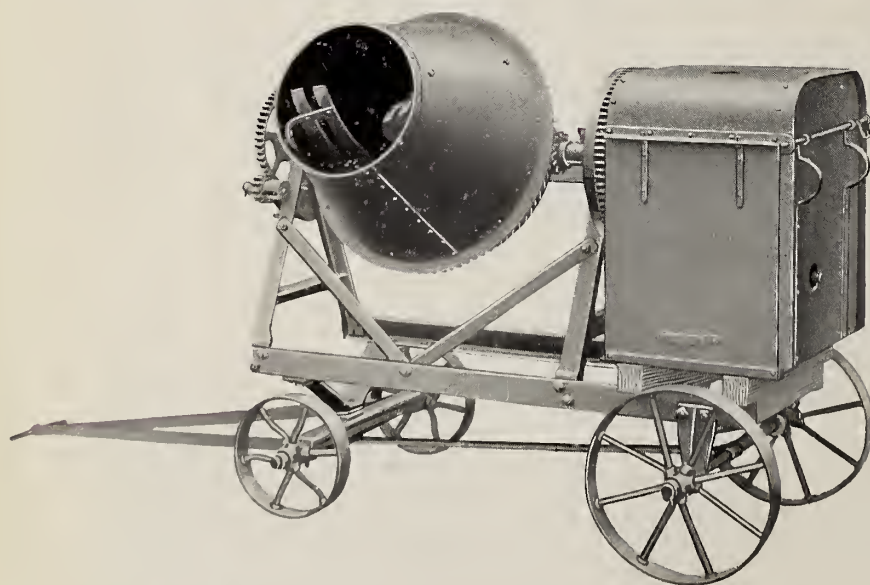


Fig. 8120. Ideal Mixer No. 3 or 3½S on Steel Wheels.

The Trailer Mixer can be hitched behind a truck and hauled over rough roads without injury by vibration. This type of mounting is very popular on both types of machines. The four wheel truck is generally used where the machine is to be loaded if the distance between jobs is very great. Steel wheels are satisfactory for short hauls.

Full specifications of these Mixers are given in Catalogue No. 527 illustrating our full line of Tilter Mixers.

Output No.	Description	Weight Each	For Export		Code Word
			Weight Boxed Per dozen	App. Cu. Ft. space Per dozen	
000	No. 3 on Skids with Pulley or Gear	489	600	30	Annz
002	No. 3 on 4 Wheel Trucks with 1½ H.P. Novo Gasoline Engine, housed	1020	1200	42	Akox
0030	No. 3 Two Steel Wheel Trailer, with 1½ H.P. Novo Gasoline Engine, housed	1122	1334	42	Xemp
0011	No. 3½ on 4 Steel Wheels with 2 H.P. Novo Gasoline Engine, housed	1195	1435	50	Aqid
0010	No. 3½ Two Steel Wheel Trailer, with 2 H.P. Novo Gasoline Engine, housed	1210	1430	50	Aonb
0050	Rubber Tired, Roller Bearing Wheels for No. 3 or No. 3½ Trailer, extra	66	66		Ths

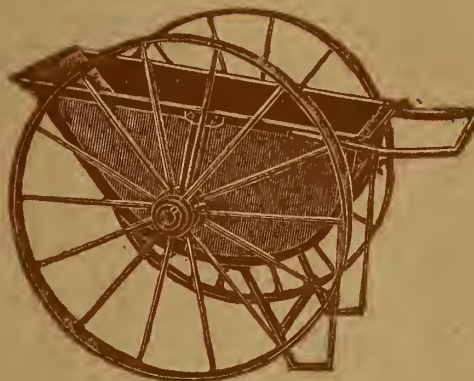
London Concrete Barrows and Carts

CART NO. 1

Axle Spindle— $1\frac{3}{4}$ " cast steel.
Tray—14 gauge, reinforced with angle iron around top and bottom edges.
Overall Length—53", width $35\frac{1}{2}$ ", wheel 36" in diameter.
Capacity—6 cu. ft. dry, 5 cu. ft. wet.
Weight—200 lbs. All parts painted.

CART NO. 2

No axle through or under body.
Axle Spindle—2" cast steel, tapered. Will wear longer on account of extra large bearing surface. Grease cups on hubs.
Tray—Bottom 14 gauge, Sides 12 gauge, reinforced with angle iron around top and bottom edges.
Overall Length—54", width 37", wheel 42" in diameter.
Capacity—7 cu. ft. dry, 6 cu. ft. wet.
Weight—225 lbs.



NO. 25A4 WITH RISER



The London General Purpose Barrow No. 25A4 is especially adapted for General Contractor's use.

Handles— $1\frac{3}{4}$ "x $2\frac{1}{4}$ ", not tapered, thus having full strength at point of greatest strain, just back of tray.
Nose Guard—Heavy angle iron which will not bend out of shape or slip when dumping.
Wheel—16" diameter. Easy rolling.
Tray— $29\frac{1}{2}$ "x37", vertical depth $6\frac{1}{2}$ " rear, 9" front.
Capacity—4 cu. ft. dry, 3 cu. ft. wet.
Weight—70 lbs.
 All parts painted.

The London Wet Concrete Barrow No. 64 has narrow deep stamped tray, especially designed for pouring concrete and use in narrow spaces.

Handles—Extra heavy, $1\frac{7}{8}$ "x $2\frac{1}{2}$ "x63".
Nose Guard—Heavy angle iron.
Wheel—16" in diameter. Easy wheeling.
Tray—15 Gauge, $25\frac{1}{2}$ "x39 $\frac{1}{2}$ ". Vertical depth at handles $7\frac{1}{4}$ "; at wheel $10\frac{3}{4}$ ".
Capacity—4 cu. ft. dry, 3 cu. ft. wet.
Weight—70 lbs.

NO. 64 WITH WOOD RISER



London Concrete Barrows and Carts

Outfit No.	Description	Weight Each	For Export		Code Word
			Weight Boxed Per dozen	App. Cu. Ft. space Per dozen	
287	No. 1 Concrete Cart.....	200	3400	190	Oabn
2870	No. 2 Concrete Cart.....	225	3800	210	Oabo
288	No. 25A4 General Purpose Barrow.....	65	1110	53	Ozbn
289	No. 64 Wet Concrete Barrow.....	72	1200	55	Olby

We make a full line of Wheelbarrows and Scrapers. Catalogue on request.

